DOCUMENT RESUME

ED 321 796 JC 900 382

AUTHOR Hall, Barbara Ann
TITLE Variables Affecting the Academic Success of Community College Transfer Students.
PUB DATE May 90
NOTE 299p.; Ph.D. Dissertation, Claremont Graduate School.
PUB TYPE Dissertations/Theses - Doctoral Dissertations (041) -- Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC12 Plus Postage.
DESCRIPTORS Academic Achievement; *Articulation (Education); *College Environment; *College Transfer Students; Community Colleges; Enrollment Influences; Family Influence; Literature Reviews; *Performance Factors; State Universities; Student Characteristics; Student College Relationship; Student Educational Objectives; Tables (Data); Two Year Colleges

ABSTRACT

In 1990, a research study was conducted to discover which variables students identified as being significant to their academic success, first at Mt. San Antonio Community College (MSAC), then after they transferred to the California State University (CSU) or to the University of California (UC). An important goal of the study was to determine if the variables that were significant to the students at the community college remained equally significant or changed after they transferred to the four-year institution. Fifty-five percent of the CSU and 72% of the UC transfers responded to the survey. The study verified that transfers from MSAC to CSU and UC had been under-reported, that significantly more part-time students persisted to transfer, that the majority of respondents worked 21 to 30 hours per week, and that students were predominantly female, older, and of an ethnic background other than white. At MSAC and the universities, remedial programs were significant to about one-quarter of the respondents. All respondents rated the 57 personal, instructional, and student service variables within a close percentile range at both MSAC and the universities. Fourteen variables received highest ratings from both CSU and UC transfers, including clear deadlines for class assignments; personal self-motivation; concerned, responsive, and knowledgeable faculty; and helpful parents/guardians and friends. The study ultimately confirmed previous research that the most important variables outside of self-motivation for maintaining student persistence were related to human interaction. Eight appendixes are attached, including the survey instrument, cover letters, and student ethnic and educational data. (JMC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED321796

VARIABLES AFFECTING THE ACADEMIC SUCCESS OF COMMUNITY COLLEGE TRANSFER STUDENTS

by

BARBARA ANN HALL

A Dissertation submitted to the Faculty of The Claremont Graduate School in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Graduate Faculty in Education.

Claremont, California

1990

JC900382

Approved by:

Malcolm P. Douglass

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

B. A. Hall

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

X Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

© Copyright by Barbara Ann Hall, 1990
All Rights Reserved

We, the undersigned, certify that we have read this dissertation and approve it as adequate in scope and quality for the degree of Doctor of Philosophy.

Dissertation Committee:

Malcolm R. Douglass, Chair

Philip H. Dreyer, Member

Charles T. Kerchner, Member

Carter Doran, Visiting Examiner

Abstract of the Dissertation

VARIABLES AFFECTING THE ACADEMIC SUCCESS
OF COMMUNITY COLLEGE TRANSFER STUDENTS

by

BARBARA ANN HALL

The Claremont Graduate School: 1990

Identification by students of the variables significant to achieving their academic goals at Mt. San Antonio Community College (MSAC) and after they transferred to the California State University (CSU) or the University of California (UC) was the purpose of this study. In addition to identifying the variables, it was important to learn if they were different or their degree of significance changed after students transferred. To determine if they were more important to males or females, White or non-White students, or students whose home language was not English, t tests were used. The study population was from a new transfer data base developed cooperatively by Mt. San Antonio College Information Services, the California State University, and the University of California. Fifty-five percent of the CSU and 72 percent of the UC transfers responded to the survey. Analysis of responses was done with an SPSS program in an IBM mainframe computer.

Major findings included: verification that transfers from MSAC to CSU and UC had been under reported, significantly more part-time students persisting to transfer, majority working 21 to 30 hours per week, more females, older students, and ethnic groups other than White. At MSAC and the universities, remedial programs were significant to 21.3 to 33.3 percent of the respondents. Books were important to respondents while they were growing up. They had access to libraries. All respondents rated the 57 personal, instructional, and student service variables within a close percentile range at MSAC and the universities. Fourteen variables received highest ratings from both CSU and UC transfers: clear deadlines for class assignments, my self motivation, faculty who were well organized, faculty giving me a class syllabus, faculty knowledge of subject, faculty who were concerned and responsive to student needs, a helpful library staff, using the library to help me complete class assignments, mother/stepmother, friends I met, father/stepfather, friends I studied with, faculty member, friends who had the same major. The study confirmed previous research that the most important variables outside of self motivation for maintaining student persistence are related to human interaction.

GRATEFUL ACKNOWLEDGMENT

To my husband, John, and my family, Amy, Barbara, Jeffrie Ann, Michael, and Steve, whose encouragement and faith never wavered.

To Jack Randall, President/Superintendent, Mt. San Antonio College, who recognized the need and supported transfer research.

To Hal Roach and Dwight Ayle, who developed the Mt. San Antonio College Transfer Reporting System that provided the data base for the research.

To Jill Tronvig, who gave expert assistance with data analysis programming.

To Vera Drino, for her assistance with data entry.

To Margie Lewis, Long Beach Community College, and Nancy Maffris, Rio Hondo Community College, who served as outside evaluators for the development of the response categories for the open question.

To Dorothy Fleck and Laraine Turk, California State Polytechnic University, Pomona, who assisted with the survey field test.

To Ethel Parker and Odette Pietzsch, for their support and assistance with the manuscript and its many drafts.

To Carter Doran, Vice Chancellor, Academic Affairs, Rancho Santiago Community College District, who lent his wisdom as outside examiner.

To my committee--Malcolm Douglass, Philip Dreyer, and Charles Kerchner--who listened, clarified, and were always there when I needed them.

TABLE OF CONTENTS

Acknowledgments v

List of Tables xi

Chapter

I. INTRODUCTION 1

Purpose of the Study 1

Importance of the Study 1

Barriers to the Evaluation of the Community College Transfer Function 4

Mt. San Antonio College Transfer Data Base 5

Study Objective 5

Organization of the Study 6

Research Questions 8

II. LITERATURE REVIEW 10

National Studies on Transfers from Two-Year to Four-Year Colleges and Universities ... 10
Early Transfer Studies 11
The Knoell-Medsker National Study of Junior College Transfers to Four-Year Colleges and Universities 13

The Question of the Primacy of the Transfer Function, an Enigma of Opposing Values ... 17
Strayer Report Defines the Transfer Function 19
Restudy of the Needs of California in Higher Education 20
A Study of the Need for Additional Centers of Public Education in California 22
A Master Plan for Higher Education in California, 1960-1975 22
Unity, Equity, Quality and Efficiency in California Post Secondary Education: The 1987 Master Plan 23
Primacy of the Transfer Function 24

California Studies on Transfers to Four-Year Institutions 26
Coordinating Council for Higher Education Study 26
California Postsecondary Education Commission Replaces the Coordinating Council for Higher Education 27
The Statewide Longitudinal Study, 1978-1981 29
SLS Student Prototype 30
Transfer Data Reported to California Colleges from the California Post-Secondary Education Commission and the State Universities 34
The Decade of Uncertainty 40

Ford Foundation Urban Community College/ Transfer Opportunities Program Studies ... 44
Student Follow-up and Data Collection . 45
Improving the Academic Environment 45
Responsive Support Services 45

Individual California Community College Transfer Studies 46

III. RESEARCH METHODOLOGY 51

Development of the Mt. San Antonio College Transfer Data Base 51
The Study Population, the Survey, and Data Collection 53
UC Sample 53
CSU Sample 54
The Survey 55
Data Collection 56
Data Analysis 57

IV. FINDINGS 59

Enrollment Tape Analysis and Survey Respondents' Demographics 59
Enrollment Tape Analyses 59
Institutions of Origin for MSAC Transfers to CSU 64
Twelve Largest Intermediate Campuses Credited with Largest Number of MSAC Transfers to CSU 64
The Gender and Ethnic Background of MSAC Transfers who Attended an Intermediate Institution 66
Survey Respondents' Demographics-- Ethnicity and Gender, CSU Transfers . 68
Ethnicity and Gender of UC Transfers .. 68

Age Survey Respondents First and Last Attended MSAC 68
High Schools Attended by Survey Respondents 73
Survey Respondents' Academic Goals at MSAC 73
CSU and UC Campuses Attended by MSAC Transfers 75
Majors and Degrees Earned by Survey Respondents 75
Current Occupations of Survey Respondents 81
Survey Respondents' Employment While Attending MSAC and CSU, UC 82
Comparison of the Number of Hours Worked by Male and Female Transfers . 83

College Financial Aid and Other Income Sources for Survey Respondents 86
CSU Transfers 86
UC Transfers 86

CSU and UC Respondents' Parents' Education Levels 88

Crosstabulations of CSU and UC Survey Respondents' Parents' Education Level by Home Language 89
CSU and UC Survey Respondents' Home Language 97

Survey Respondents' Early Home and School Literacy Environment 98
Bilingual Classes Attended by CSU and UC Survey Respondents 98
Early Reading Related to College Success 101

CSU and UC Survey Respondents' Early Home and School Literacy Environment 101

V. RESPONSES, FINDINGS, AND DISCUSSION 113

The Importance of Parents, Siblings, Spouse, and Friends in Helping CSU and UC Transfers Reach Their Academic Goals 113

The Importance of Self Motivation, Personal Relationships, and Religious Affiliation in Helping CSU and UC Transfers Reach Their Academic Goals 119

The Importance of Counselors, Educational Advisors, and Faculty in Helping CSU and UC Transfers Reach Their Academic Goals 125

The Importance of Faculty and Instructional Programs in Helping CSU and UC Transfers Reach Their Academic Goals 135

Discussion of Student Ratings of Personal and Faculty Variables 152

The Importance of Student Services and Campus Programs in Helping CSU and UC Transfers Reach Their Academic Goals 156

The Importance of Library Staff and Programs in Helping CSU and UC Transfers Reach Their Academic Goals 176

The Importance of Learning Assistance Classes, Tutorial Services, AMLA, and ESL Classes in Helping CSU and UC Transfers Reach Their Academic Goals 187

CSU, UC Transfer Responses to Open Question About MSAC Role in Helping Them Reach Their Academic Goals 206

VI. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH 208

The Purpose and Importance of the Research.. 208
- The Political Implications of Changes in Community College Transfer Rates.. 210
- Barriers to the Evaluation of the Community College Transfer Function 211

Mt. San Antonio College Transfer Data Base.. 211

Summary of Findings 212
- Analysis of the New Transfer Data Base 212
- Demographic Comparison CSU and UC Respondents Ethnicity, Gender, Age .. 213
- High Schools Attended by Respondents .. 214
- Academic Goals and Degrees Earned by Survey Respondents 214
- CSU and UC Campuses Attended by MSAC Transfers 215
- Transfers' Employment While Attending MSAC and the Universities 215

Transfers' Current Occupations 216
Respondents' Parents' Education Level.. 216
Survey Respondents' Home Language and Early Literacy Environment 217
Home Language and Bilingual Classes ... 217
Early Literacy Environment 218
The Role of Self Motivation and Significant Others in Assisting CSU, UC Transfers in Reaching Their Academic Goals 220
Ratings for Significant Others 220
The Eight Highest Rated Instructional Variables 221
The Four Highest Rated Learning Assistance Variables 222
The Six Highest Rated Student Services and Campus Programs that Assisted Transfers in Reaching Their Academic Goals 223

Conclusions and Recommendations for Future Research 224
Profile of the New Transfer Student ... 224
The Role of Significant Others for the New Transfer Population 225
Academic Teaming 227
The Need for a New System of Evaluating Student Progress Through

Appendix 232

References 266

LIST OF TABLES

Table

1. MSAC Students Attending CSU Summer 1978-Spring 1987 MSAC Transfer Reporting System 61
2. CSU Transfer Figures for MSAC Students CPEC Update 62
3. Student Transfers to CSU, 1978-1987 63
4. MSAC Transfers to UC System, 1982-1985 63
5. Institutions Credited by CSU as Having Transferred Students Who Completed 24 or More Units at MSAC 65
6. Twelve Intermediate Campuses Credited with the Largest Number of MSAC Transfers to CSU 67
7. Crosstabulation MSAC Population CSU Transfers by Gender and Ethnicity 69
8. Crosstabulation MSAC Population UC Transfers by Gender and Ethnicity 71
9. The Age CSU, UC Transfers First and Last Attended MSAC 72
10. Survey Respondents' High School Graduation Date . 73
11. High Schools Attended by CSU, UC Transfers 74
12. Academic Goal at Mt. San Antonio College 76
13. CSU, UC Campuses Attended by MSAC Transfers 77
14. Degrees Earned by CSU Survey Respondents 79
15. Majors and Degrees Earned by UC Survey Respondents 80
16. Current Occupations, CSU/UC Transfers 82
17. Hours CSU, UC Transfers Worked Per Week While Attending MSAC 84
18. Hours Transfers Worked Per Week While Attending CSU and UC 84
19. Income Sources for CSU Transfer Students 87

20. Income Sources for UC Transfer Students 87

21. CSU and UC Transfers' Fathers' Education Level by Respondents' Gender 89

22. CSU and UC Transfers' Mothers' Education Level by Respondents' Gender 90

23. Crosstabulation of CSU Transfers' Fathers' Highest Education Level by Home Language 90

24. Crosstabulation of CSU Transfers' Mothers' Highest Education Level by Home Language 91

25. Crosstabulation of UC Transfers' Fathers' Highest Education Level by Home Language 92

26. Crosstabulation of UC Transfers' Mothers' Highest Education Level by Home Language 92

27. Crosstabulation CSU Survey Respondents' Fathers' Education by Ethnicity 93

28. Crosstabulation CSU Survey Respondents' Mothers' Education by Ethnicity 94

29. Crosstabulation UC Survey Respondents' Fathers' Education by Ethnicity 95

30. Crosstabulation UC Survey Respondents' Mothers' Education by Ethnicity 96

31. Crosstabulation of CSU Respondents' Attendance in High School Bilingual Classes by Their Home Language 99

32. Crosstabulation of UC Respondents' Attendance in High School Bilingual Classes by Their Home Language 100

33. To What Degree Books Were Important to CSU, UC Transfers While Growing Up 102

34. Mean Scores for Variable Were Books Important While Growing Up For Male and Female CSU Respondents 102

35. Mean Scores for Variable Were Books Important While Growing Up for Male and Female UC Respondents 103

36. Crosstabulation by Home Language of CSU, UC Transfers' Responses About Importance of Books While Growing Up 104

37. How Often CSU, UC Transfers Were Read to as Children 104

38. Crosstabulation of CSU, UC Transfer Responses About How Often They Were Read to As Children ... 105

39. Persons Who Read to CSU, UC Transfers When They Were Children 106

40. CSU and UC Transfers' Parents Who Received a Daily Newspaper 107

41. Crosstabulation by Home Language of CSU, UC Transfers' Responses to Question, "Did Your Parents Receive a Daily Newspaper?" 107

42. CSU, UC Transfers Who Watched Television Before Attending School 108

43. Crosstabulation by Home Language of CSU, UC Transfers' Responses to Question "Before You Attended School, Do You Remember Watching Television?" 109

44. CSU, UC Transfers' Library Visits as Children ... 110

45. Crosstabulation by Home Language of CSU, UC Transfers' Responses to How Often They Visited a Library as a Child 110

46. Libraries in Schools Attended by CSU, UC Transfers 111

47. Importance of Parents, Siblings, Spouse, and Friends in Helping UC Transfers Reach Academic Goals 115

48. Importance of Parents, Siblings, Spouse, and Friends in Helping CSU Transfers Reach Academic Goals 116

49. Mean Scores for Other Relative and Spouse Variables for Male and Female CSU Transfers 118

50. Mean Scores for Sibling and Spouse Variables For White and Non-White CSU and UC Transfers 118

51. Mean Scores for Sibling Variables for Home Language, English and Non-English CSU Transfers . 119

52. The Importance of Self Motivation, Personal Relationships, and Religious Affiliation in Helping CSU Transfers Reach Their Academic Goals 120

53. The Importance of Self Motivation, Personal Relationships, and Religious Affiliation in Helping UC Transfers Reach Their Academic Goals . 122

54. Mean Scores for Self Motivation and Personal Relationship Variables for CSU Transfers 124

55. Mean Scores for Personal Relationship and Religious Affiliation Variables for UC Transfers 126

56. The Degree High School and College Counselors, Educational Advisors, and Faculty Were Important in Helping CSU Transfers Reach Their Academic Goals 127

57. The Degree High School and College Counselors, Educational Advisors, and Faculty Were Important in Helping UC Transfers Reach Their Academic Goals 128

58. Mean Scores for High School Instructor and Counselor Variables for CSU Transfers 130

59. Mean Scores for High School Instructor, Counselor, and Educational Advisor Variables for UC Transfers 131

60. Variables Significant to CSU and UC Transfers' Academic Success at MSAC 132

61. Variables Significant to Transfers' Academic Success at CSU, UC 134

62. The Degree Faculty and Instructional Programs Were Important in Helping CSU Transfers Reach Their Academic Goals 136

63. The Degree Faculty and Instructional Programs Were Important in Helping UC Transfers Reach Their Academic Goals 139

64. Mean Scores for Selected Faculty and Instructional Program Variables for Male and Female CSU Transfers 143

65. Mean Scores for Selected Faculty and Instructional Program Variables for White and Non-White CSU Transfers 145

66. Mean Scores for Selected Faculty and Instructional Program Variables for Language English and Non-English CSU Transfers 146

67. Mean Scores for Selected Faculty and Instructional Program Variables for Male and Female UC Transfers 147

68. Mean Scores for Selected Faculty and Instructional Program Variables for White and Non-White UC Transfers 148

69. Mean Scores for Selected Faculty and Instructional Program Variables for Home Language English and Non-English UC Transfers ... 149

70. Variables Significant to CSU and UC Transfers' Academic Success at MSAC 150

71. Variables Significant to Transfers' Academic Success at CSU, UC 153

72. The Importance of Student Services and Campus Programs in Helping CSU Transfers Reach Their Academic Goals 157

73. The Importance of Student Services and Campus Programs in Helping UC Transfers Reach Their Academic Goals 161

74. Mean Scores for Selected Student Services and Campus Program Variables for Male and Female CSU Transfers 164

75. Mean Scores for Selected Student Services and Campus Program Variables for White and Non-White CSU Transfers 166

76. Mean Scores for Selected Student Services and Campus Program Variables for Home Language English and Non-English CSU Transfers 168

77. Mean Scores for Selected College Student Services and Campus Program Variables for White and Non-White UC Transfers 171

78. Mean Scores for Selected College Student Services and Campus Program Variables for Home Language English and Non-English UC Transfers ... 172

79. Variables Significant to CSU and UC Transfers' Academic Success at MSAC 174

80. Variables Significant to Transfers' Academic Success at CSU, UC 175

81. The Degree Library Staff and Programs Were Important in Helping CSU Transfers Reach Their Academic Goals 177

82. The Degree Library Staff and Programs Were Important in Helping UC Transfers Reach Their Academic Goals 178

83. Mean Scores for Selected Library Staff and Program Variables for Male and Female CSU Transfers 181

84. Mean Scores for Selected Library Staff and Program Variables for White and Non-White CSU Transfers 182

85. Mean Scores for Selected Library Staff and Program Variables for Home Language English and Non-English CSU Transfers 183

86. Mean Scores for Selected Library Staff and Program Variables for UC Transfers 184

87. Variables Significant to CSU and UC Transfers' Academic Success at MSAC 185

88. Variables Significant to Transfers' Academic Success at CSU and UC 186

89. The Importance of Learning Assistance Classes, Tutorial Services, AMLA and ESL Classes in Helping CSU Transfers Reach Their Academic Goals 190

90. The Importance of Learning Assistance Classes, Tutorial Services, AMLA and ESL Classes in Helping UC Transfers Reach Their Academic Goals 192

91. Mean Scores for Selected Learning Assistance, Tutorial, AMLA and ESL Variables for White and Non-White CSU Transfers 194

92. Mean Scores for Selected Learning Assistance, Tutorial, AMLA and ESL Variables for Home Language English and Non-English CSU Transfers .. 197

93. Mean Scores for Selected Learning Assistance, Tutorial, AMLA and ESL Variables for White and Non-White UC Transfers 199

94. Mean Scores for Selected Learning Assistance, Tutorial, AMLA and ESL Variables for Home Language English and Non-English UC Transfers ... 201

95. Variables Significant to CSU and UC Transfers' Academic Success at MSAC 202

96. Variables Significant to Transfers' Academic Success at CSU and UC 203

97. CSU, UC Transfer Responses to Open Questions About MSAC Role in Helping Them Reach Their Academic Goals 207

CHAPTER I

INTRODUCTION

Purpose of the Study

The purpose of the research reported here was to discover which variables students identified as being significant to their academic success, first at Mt. San Antonio Community College, and then after they transferred to the California State University or the University of California. Taking the nature of their college experience as a variable, the study was designed for students to retrospectively identify significant persons, instructional, and student service programs that assisted them in reaching their academic goals.

Importance of the Study

In July 1987, the California Community Colleges, the California State University, and the University of California received a mandate from the new master plan for higher education to work together toward the goal that more students might move successfully from community colleges to the two university systems. Although California Community College enrollment had increased dramatically during the seventies, the California Postsecondary Education Commission (CPEC) studies showed there were fewer

students transferring from the community colleges to the state universities. These studies showed a decline in the number of transfers, particularly among Blacks and Hispanics. There were accusations that vocational programs, adult education, and community service programs had adversely affected the transfer program. The criticism implied that the runaway growth of these programs had turned community colleges away from their historic function of preparing students to transfer to four year colleges and universities. California Community Colleges did not have the facts and figures to respond to this accusation. The political implications of changes in community college transfer rates were enormous at the time. California public education faced strong political and fiscal uncertainty in the decade between 1973 and 1983. Strident calls for educational accountability came during this period from the legislature that was being called upon to validate the growing cost of public education. The demands from all segments for money were increasing. Each segment faced the challenge of justifying their programs and services in light of the growing criticism of their educational value.

The financial impact of Proposition 13 exacerbated the problem for community colleges by removing funding control from the local districts, thereby forcing them increasingly to depend for money on state-devised formulas. Pressure mounted on the legislature to develop

a new educational master plan. In 1985, the Commission for the Renewal of the Master Plan for Higher Education was appointed for this purpose. In July 1987, the commission published The Master Plan Renewed: Unity, Equity, Quality, and Efficiency in California Post Secondary Education. Among the final recommendations was the mandate to increase transfers from community colleges and to recognize that "the trend toward part-time and older student populations that are more ethnically diverse is clear. The need to adapt post-secondary programs to accommodate these students is apparent" (p. 8). Clearly the time for identifying the variables important in assisting students to reach their academic goal to successfully transfer from a community college to a state university had arrived. Research that could assist community colleges and the two state university systems to cooperatively develop transfer programs did not exist. There was a scarcity of studies on community college transfers to four year colleges and universities. Past research on student persistence by Anderson (1985), Austin (1975), Polland (1983). Terenzine and Pascarella (1977), and Tinto (1987) dealt mainly with full-time students at four year colleges. The research on student persistence had focused attention more on the non-persisting student who dropped out of college or withdrew from classes.

The first national study of students transferring from community college to four year colleges was done by

Knoell and Medsker (1965). The study presented important findings on variables associated with student success. However, its population reflected the age, ethnicity, gender, and socioeconomic background of college students in the sixties. In the last twenty-nine years the college transfer population has changed. The community colleges and the two state university systems urgently needed current research on the variables associated with student success that could assist them to increase their transfer and retention rates.

Barriers to the Evaluation of the Community College Transfer Function

There have been two major barriers to accurately assessing how well California Community Colleges are performing the transfer function. The first has been the lack of a complete transfer data base and a system of tracking all students who transfer from community colleges to public and private four year colleges and universities. The second has been the lack of an accurate data base of community college students who actually plan to transfer. According to Cohen and Brawer (1982) and Tronass (1984), an inflated projection of the potential number of transfer students from community colleges has been in existence due to the practice of asking first-time freshmen if they plan to transfer. "Few will say that they never intend to transfer to a senior institution" (p. 53).

Comparisons showing the number of Fall transfers and the total credit enrollment have produced a highly skewed

impression of the transfer rate because these comparisons fail to exclude reverse transfers, concurrent enrollees (students enrolled at a community college as well as a four year college), and students enrolled to develop and upgrade job skills with no intention of transferring.

Mt. San Antonio College Transfer Data Base

The sample population for this study was drawn from a new transfer data base developed by the Mt. San Antonio College Information Services. The data base was created through a cooperative effort between Mt. San Antonio College, the California State University, and the University of California. The development of this new data base made it possible to conduct this study.

Study Objective

The purpose of the study was to identify the variables significant to the academic success of students who completed 24 or more units at Mt. San Antonio College, a large, suburban California Community College, and transferred to the California State University or the University of California.

An important aspect of the study was to learn if the same variables were significant to the students at the community college and after they transferred to a state university. Did the degree of significance change after the transfer? Were the variables more significant to males or females, White or non-White students, or students whose home language was not English?

Organization of the Study

Chapter II--Literature Review. Due to the paucity of research in transfers from community colleges to four year colleges and universities, the literature review was broadened to include major state policy studies and reports that addressed the issue of transfers moving from community colleges to the California State University systems. Early national studies are included as well as studies done by individual community colleges.

Chapter III--Research Methodology. Chapter III includes a discussion of the method used by Mt. San Antonio College, the California State University, and the University of California to compare enrollment tapes and the design of the Mt. San Antonio College Transfer Reporting System (MSACTRS). The study population was drawn from the data developed by the MSACTRS in cooperation with the two state university systems. The chapter discusses the development of the survey, the data collection, and analysis procedures. The SPSS-X program for the IBM mainframe computer was used to analyze the data received from the 588 respondents.

Chapter IV--Findings. Chapter IV presents a brief analysis of the Mt. San Antonio College Transfer Reporting System (MSACTRS) enrollment tapes that provided the data base for the study. The analysis is followed by a demographic profile of the survey respondents. The profile includes their ethnicity, gender, age, academic goals,

number of hours worked per week and source of income while attending college, major, degrees, current employment, parents' education, home language, and early home and school literacy environment. The early literacy variables are crosstabulated by home language.

Chapter V--Responses, Findings, and Discussion. Chapter V presents the responses from the CSU and UC transfers to questions about college faculty; instructional, library, and remedial programs, student services; campus activities; self motivation; personal relationships; and religious affiliations. The discussion represents the transfers' selection of the persons, instructional, and student service programs that they felt helped them to be academically successful at Mt. San Antonio College and at the universities after they transferred. Throughout the chapter, the responses of the CSU and the UC transfers are compared and discussed. The significant results of the t tests comparing the responses of male and female transfers, those who home language was English and not English, those who were White and non-White, are presented and discussed.

Chapter VI--Summary, Conclusions, and Recommendations for Future Research. Chapter VI summarizes the results of the research presenting the variables that were most significant for the CSU and UC respondents at Mt. San Antonio College and after they transferred to the state university systems.

Research Questions

The study was designed to answer the following questions.

1. What was the demographic profile of the students who completed 24 or more units at Mt. San Antonio College and transferred to the California State University or the University of California between Summer 1978 and Spring 1987?
   a. Were there differences between the ethnicity, gender, age, academic goals, number of hours worked per week and source of financial support, majors, and degrees of the CSU and the UC transfers?
   b. What were the parents' education levels and home languages of the CSU and UC respondents?
   c. Were there differences when transfers' parents' education level was crosstabulated by home language?
2. What was the early home and school literacy environment of the CSU and UC transfers?
   a. Were books important to CSU and UC respondents while they were growing up?
   b. Did they visit libraries?
   c. Who read to them?
   d. Did their family receive a daily newspaper?
   e. Did they attend bilingual classes?
   f. Did they have libraries in the elementary, junior, and senior high schools they attended?

3. What were the personal, instructional, and student service variables that were significant in assisting CSU and UC transfers in reaching their academic goals?
   a. Were these variables different at Mt. San Antonio College from the state universities?
   b. Did the CSU and the UC transfers select different variables?
   c. Were the variables more or less significant for male and female transfers, White or non-White transfers, or transfers whose home language was English or non-English?
4. Are there implications for state policy about the tracking of students between California Community Colleges and the state universities from the analysis of the new Mt. San Antonio College transfer data base?

CHAPTER II

LITERATURE REVIEW

National Studies on Transfers from Two-Year to Four Year Colleges and Universities

There is a scarcity of national studies on student transfers from two-year to four-year colleges and universities. There is the added dilemma that comparisons of transfer success between California's open door, low tuition community colleges and community colleges in other states are difficult to make because of the wide variance in both populations and governance. In other states the enrollment is often selective, and more tuition is charged. There is consequently the problem of developing valid national transfer statistics.

In 1979, Cohen studied the methods used by states to count transfers from two-year to four-year colleges. The results showed that:

> ...a single college, a single state, may have more or less reliable information, but it is impossible to compare with the corresponding data from other colleges and other states because of the varying definitions and reporting procedures employed (Cohen, 1979, p. 3).

According to Kintzer and Wattenbarger (1985), six years later, the problem of comparing transfer rates remained. In their study of articulation and transfer they cite the

following barriers to the development of valid national statistics on transfer rates: first, the small number of states collecting transfer statistics, and second,

> ...the lack of definition and reporting uniformity among those who do, severely limit the meaning of the data at hand. In fact, the situation should be recognized as an embarrassment, a warning to educators to get their act together (Kintzer & Wattenbarger, 1985, p. 8).

Nationally, the problems of defining transfer rate and criteria evaluating the quality of transfer students' performance exist in an ambiguous no-man's-land.

Early Transfer Studies

National studies of transfer students prior to 1970 focused on aggregate descriptive data showing the growth of the junior colleges, numbers of students engaged in transfer programs, and the number who transferred. In 1930, Walter Crosby Eells published The Junior College, devoting an entire chapter to the California Junior Colleges. Ten years later, in American Junior Colleges, he stressed California's leadership in providing this level of education, having then one-fifth of all junior colleges and almost 50 percent of the enrollment in the United States.

The early studies by Eells (1930, 1941) showed that approximately two-thirds of the students enrolled in community colleges were in transfer programs. Studies by Bird (1956) and Medsker (1960) found that junior college transfer students often did not do as well as students who began at a four-year college. They also found that junior

college transfers had a higher attrition rate. As well, their GPA dropped the first semester after transfer, while requiring more time to complete the degree.

In 1960, Medsker showed the same ratio of transfer students to non-transfer students. After 1960, students in transfer programs began to decline. Lombardi (1979) showed the rate dropping below 50 percent. By 1983, according to the American Association of Community and Junior Colleges Fact File, "sixty-three percent of the students enrolled in America's two-year community and technical colleges were enrolled in vocational programs" (ACJC, 1983, p. 3).

The first large-scale national study of junior college transfer and terminal programs was published by Medsker in 1960. This study covered the performance and retention of transfer students from junior colleges to four-year universities. It also covered the programs and purposes of junior colleges, faculty attitudes and student services. That same year, in California, Clark (1960) published a case study of the development of San Jose Junior College. He compared the transfer curriculum with the "terminal" programs, finding that two-thirds of the students at San Jose Junior College were in transfer curricula, but only one-third went on to four-year colleges. Clark referred to these non-transfers as latent terminals.

The Knoell-Medsker National Study of Junior College Transfers to Four Year Colleges and Universities

In 1965, the American Council on Education published a landmark national study titled From Junior to Senior College--A National Study of the Transfer Student (ED013632). The study was commissioned by the American College Association's Joint Committee on Junior and Senior Colleges and the American Association of Collegiate Registrars and Admission Officers. Carried out by Knoell and Medsker it studied freshmen from 345 two-year colleges who had transferred in 1960 to 43 senior colleges and universities in ten states.

The states selected were California, Florida, Georgia, Illinois, Kansas, Michigan, New York, Pennsylvania, Texas, and Washington. Though private schools were represented in both two- and four-year institutions, they were under-represented in the study. California comprised 30 percent of the sample. There were 5,174 men and 2,069 women. Students in the study were primarily full-time. In 1960, 2,846 had transferred with junior standing, and 1,180 had transferred at an earlier date. This sample was compared with 3,349 native students who had graduated in 1962. Data were collected from student records and questionnaires. Ten personal interviews were conducted on each campus. Eighty-four percent of the 1960 transfers and nearly 90 percent of the graduate comparison group responded to the questionnaire.

The response from drop-outs who were dismissed was 31 percent and from those who withdrew voluntarily was 38 percent.

Knoell and Medsker found that the majority of junior college transfers were white, Protestant, of native born parents, and under 21 years of age when they entered the four-year institution. Their demographic profile was like that of the native population found in the four-year institutions. There were many more men than women and the high school record of the men was inferior to the women. "A majority of both groups took general or college preparatory programs in high school and graduated in the upper half of their class" (p. 18).

Economic considerations were important in selecting a junior college. Three of the reasons most frequently mentioned were: low cost, location near home, and opportunity to work while attending school. A large number of the fathers were in skilled or semi-skilled occupations. Male students had less financial support from parents than females, lived at home, and often worked part-time. There was no variance in social class except lack of financial support for students who needed it. Twenty percent of the transfer students were self supporting versus 8 percent of the native students.

The students gave somewhat negative reasons for attending a junior college but gave high ratings to the quality of education they had received. They praised both

their junior college instructors and the scope of the curricular offerings. Junior college counseling and advising received higher ratings than did similar services offered by the four-year institutions (p. 19).

Attrition for students who transferred as sophomores was 45 percent. For those who transferred with full junior standing, it was 26 percent. Two-thirds of the transfers earned grades below 2.6, one-third below 2.4, and 6 percent averaged below 2.0.

> Many of this group had shown considerable improvement during their two years in junior college, yet nearly half dropped out a short time later, most of them with poor or failing grades (p. 38).

Sixty percent of the students with averages of 3.2 and higher graduated two years after transferring. The poorest performance was made by ...late bloomers, i.e., males with poor high school records who earned C's in junior college. Women with good grades withdrew largely for personal reasons. There were more men dismissed who had poor grades than women.

Students who worked full-time while attending junior college also experienced difficulties in completing in a timely fashion, taking three or four years to complete the lower division.

One-third of the transfer students were dismissed, and two-thirds of this group had below C averages.

> A very clear implication from the findings is that a junior college average of only a C should not be regarded as adequate and sufficient evidence of a student's ability to do satisfactory work at the upper division level at all institutions, even in the public

> sector of higher education, nor in all major fields (p. 40).

The researchers found the grades of junior college transfers were often higher in lower division than the grades of native students, but the latter earned higher grades in upper division. They also found that testing results showed that high school graduates who entered universities as freshmen had somewhat greater academic aptitude and ability than those who started in a two-year college. Transfer students who ranked in the upper quintile did not have trouble competing with native students for admission to graduate school.

The study found that self motivation was the trait linked to student success after transfer. Students without motivational problems who had a clear definition of goals and career plans, were most likely to succeed as transfers. The study reported that orientation for transfers was largely unsuccessful because it was geared for beginning freshmen. Transfer students gave less favorable ratings to the counseling and academic advising they received in junior college than they did to the instructional program. However, they were more favorable toward the counselors in junior colleges than those in four-year institutions. A large percentage of the students interviewed for the study had received no counseling at all. In the two years after transfer, 45 percent of the students in the study had graduated while slightly more than half of the non-graduates were still enrolled.

The researchers concluded that academic success for transfers to a four-year college or university is the result of a subtle accommodation between the student's attributes and the institution he or she enters. Their data showed that most four-year institutions could accommodate students with a rather wide range of academic ability. They looked at mean GPA averages earned by men and women in the junior colleges and after they transferred. A summary of significance levels of t tests of sex difference in means of GPA's is found in Appendix A. It shows the average female GPA to be higher in 38 of the 39 junior colleges and in 35 of the 39 four-year institutions.

The Question of the Primacy of the Transfer Function, an Enigma of Opposing Values

To understand the new 1987 Master Plan for Higher Education recommendations, it is necessary to look back at the evolution of the transfer function in California community colleges. Since the first California public junior college was established by Fresno High School in 1910, there has been a debate over which of the following should be their primary mission:

1. Preparing students to transfer to four-year colleges and universities.
2. Providing terminal education for the majority of college-age and older students through vocational programs and general education.

3. Responding to community needs by providing adult education in civic and liberal areas.

By 1940, one-fifth of America's public junior colleges were to be found in California, with one-half of the nation's junior college students enrolled. By 1950, the largest population of college-age students in the history of California was about to graduate from high school "and present themselves at the gates of America's colleges" (Lockard, 1986, p. 7). This was the first cohort of the baby boom generation that was to threaten to seriously overcrowd the educational institutions available in California at that time. The state population at the end of World War II had jumped from fifth to second in the United States. More students than ever before expected access to higher education. To address the resultant impending crisis of lack of space, a voluntary planning and coordinating body came into being: the Liaison Committee of the State Board of Education and the Regents of the University of California.

Between 1948 and 1960, the Liaison Committee produced four major studies for the legislature that were to significantly influence the direction of higher education in California. The first of these studies was A Report on a Survey of the Needs of California in Higher Education authored by George D. Strayer, Monroe E. Deutsch, and Aubrey A. Douglass and published by the Liaison Committee March 1, 1948.

Strayer Report Defines the Transfer Function

Commonly referred to as the Strayer Report, it stated that the most important function of the junior college (from the standpoint of the number of students and the community) is "the provision of two years of work which may be transferred to the University of California or to other standard colleges or universities" (p. 7). It went on to say that the junior colleges had been very successful in preparing students to transfer to the universities, even students with deficiencies, predicting that the number of students preparing to transfer would increase. It recommended that the large universities turn over their lower division classes to the junior colleges, concentrating on upper division and graduate school, and suggested that the California state universities as well as the University of California to follow this plan in anticipation of an increased demand for enrollment at the university. The Strayer Report recommended that two-year curricula be eliminated by the state colleges because they were "in many instances operating in areas that properly belong to the junior colleges" (p. 22). Only when there were not sufficient junior colleges did it make sense for the state colleges to offer two-year technical courses and to prepare students to transfer, a need no longer in existence. It was, according to the report, "unreasonable to expect the state to provide facilities for students who can be accommodated in junior colleges" (p. 23). The

report also recommended that state colleges cease offering two-year technical courses to devote "their attention to their programs of four or five years in length" (p. 23). It suggested that the University carry on lower division programs on a small scale, a "pilot plant" basis, to develop, "patterns and standards designed to provide the best possible preparation for advanced professional and graduate work" (p. 44). It was believed that these programs would furnish models for other institutions preparing students to transfer to the University.

The Strayer Report praised junior college vocational programs, stating,

> Unique among its purposes is the... two year vocational training for young people 18 to 21 years of age. This objective was first among those proposed by the leaders responsible for the development of junior colleges in this State... the junior colleges have consistently striven toward the goal of training for gainful occupation. It is in this area that their unique function lies (pp. 6-7).

Restudy of the Needs of California in Higher Education

The next of the four studies was the Restudy of the Needs of California in Higher Education authored by T. R. McConnell, T. C. Holly, and H. H. Semans, published by the State Department of Education in 1955, usually referred to as the Restudy. It defined the three functions of the junior colleges as "lower division pre-transfer education, vocational and technical education, and such courses of instruction as may be deemed necessary to provide for the civic and liberal education of the citizens of the

district" (p. 53). The report expressed concern about the latter function, stating that:

> It is under [this category] that the junior colleges have justified almost any adult services desired by the community. There is danger to the integrity of the basic functions of the junior college if this service is extended without limit. If the junior college insists upon being practically all things to all persons, and if it insists upon assuming what might be considered marginal educational activities, it may finally lose its identity as a post high school institution, and its primary functions may be diluted to ineffectiveness.
>
> This leads the Restudy staff to suggest that as their burdens increase the junior colleges may wish to reconsider their responsibilities for such activities as: remedial courses, Americanization and citizenship, training for the foreign born, literacy education, training in skill subjects, and opportunities for adults to complete requirements for high school graduation. These are all desirable, but it may be necessary in the future for the junior colleges to concentrate on work of post high school grade. The influx of students during the next decade will be so great that the junior colleges will be forced to re-evaluate their activities, retaining and strengthening those that are relevant to their most important functions, and curtailing and abandoning those that are marginal or incidental (pp. 52-53).

The admonition against "being practically all things to all persons" and engaging in "marginal educational activities" reflected the new directions taken in the fifties by California's Junior Colleges, although by 1955 the majority had been renamed Community Colleges and had increased their courses in non-credit adult education.

One very controversial recommendation of the Restudy was,

> ...that no new state colleges and no new campuses of the University of California be established before 1965, and that the potential enrollment be cared for by expanding the facilities of the present institutions... and the enrollment ceilings for the

> present campuses of the University of California and the state colleges be removed (p. 16).

No recommendations were made to limit the building of junior colleges in under served areas,

> because the California public junior college program... has made such a significant contribution toward equalizing educational opportunity in the state, full encouragement should be given to its development and co-ordination with the other institutions of higher education in the state (p. 19).

A Study of the Need for Additional Centers of Public Education in California

The third report in the series was authored by Hubert H. Semans and T. C. Holly, was published in 1957. This study updated the Restudy potential college enrollment figures, analyzing areas where new college facilities might be added. One of the studies' priorities was providing adequate junior college facilities prior to the establishment of an additional state college or University of California campus. According to Lockard, what was new about this study "was the realization that there had indeed been a paucity of junior college foundings" (1986, p. 215).

A Master Plan for Higher Education in California, 1960-1975

The 1960 Master Plan, the last of the four studies, was developed by an eight-member Master Plan Survey Team chaired by Arthur S. Coons, president of Occidental College. It reaffirmed the policy of no new state college or university campuses until adequate junior college

facilities had been provided. It further recommended that new UC and CSU campuses be limited to upper division and graduate work until adequate junior college opportunities for students were completed.

The plan recommended admission to the university for the top one-eighth of California's high school graduates and admission to the state colleges for the top one-third. All students would have access to the junior colleges. It also recommended that UC and CSU pursue enrollment policies leading to 60 percent upper division and 40 percent lower division by 1975. These policies were designed to divert 50,000 students to the junior colleges.

Unity, Equity, Quality and Efficiency in California Post Secondary Education: The 1987 Master Plan

The Commission for the Renewal of the Master Plan stated that the key challenge of education for the 21st century should be to provide California a literate, skilled, and informed population. To meet this challenge, educational equity needed to go beyond the legal guarantee of access to public institutions:

> Equity entails the opportunity for all persons to choose their educational paths and then to have a reasonable opportunity to accomplish their objectives. Educational equity provides the environment of fairness and responsiveness which enables each person, regardless of race, sex, or economic circumstances, to fully develop his or her educational potential... without this assurance, California cannot avoid the future now commonly predicted of a two-tiered society of well educated, middle to upper income whites and undereducated, low income minorities (p. 6).

The plan also recommended that the California State University maintain its lower division enrollment at or below 40 percent of its undergraduate enrollment system-wide. At the University of California beginning in 1989-90, lower division enrollment system-wide should be reduced one percentage point per year through 1994-95.

> University enrollment planning documents, effective 1987-88, shall reflect this change and the goal of achieving a lower division enrollment, system-wide, of no more than 40 percent of total undergraduate enrollment by 1995-96 and maintaining that level thereafter (p. 3).

This provision reaffirmed the Strayer Report recommendations and those of the 1960 Master Plan.

Primacy of the Transfer Function

The 1987 Master Plan affirmed the right of qualified students to transfer from a Community College to a baccalaureate level institution and charged all three segments of higher education to recognize that this right to be central to the success of public higher education in California. The following statement from the plan clearly states this philosophy and verifies the primacy of the transfer function.

> The transfer function shall be recognized by the Governor, the Legislature, and the governing boards as a central institutional priority of all three public segments of postsecondary education.
>
> The state shall guarantee by statute a place in postsecondary education for all qualified California students who wish to attend. Students who are eligible to enter the University of California or the California State University directly out of high school, but who attend a Community College, and all others who succeed in the transfer curriculum at the community college level, shall be guaranteed future enrollment as upper division students at the

> University of California or the California State University. The grade point average required of all such transfer students shall be the same within each segment regardless of their original eligibility, and all such transfer students shall be treated equally with continuing students for admission to the programs of their choice.
>
> Students who are eligible for admission to the University of California or to the California State University as first-time freshmen, but who elect to attend a Community College and who complete the required number of units, including the intersegmentally developed transfer core curriculum, with the requisite grade point average, shall be admitted to the University of California campus or to the California State University campus of their choice, depending upon their original eligibility, subject to the planned enrollment composition and growth for each campus.
>
> The University of California and the California State University shall require students who are not regularly eligible for admission as freshmen (other than those admitted under special provisions) to complete the intersegmentally developed transfer core curriculum at a Community College. Those who complete the required courses with the requisite grade point average shall then be assured access to the California State University system or the University of California system as transfer students with full degree credit of that coursework.
>
> The Board of Governors of the California Community Colleges shall have the authority and the responsibility to guarantee that all Community College students have access to courses that meet the lower division baccalaureate degree requirements of California public universities. The Board, with the cooperation of the University of California Regents and the California State University Trustees, shall make sure that students are clearly and fully informed as to which Community College courses and units are transferable and that requirements in Community Colleges correspond to the requirements for entry to, and success in, upper division coursework.
>
> The Governor and Legislature shall provide the financial support necessary to the Community Colleges to offer comprehensive transfer programs and support services essential to an effective transfer function (pp. 4-5).

The new 1987 Master Plan for higher education in California strongly reaffirmed the Strayer Report recommendation that the transfer function was the primary

mission of the community colleges. It also reaffirmed the Strayer Report's recommendation that lower division enrollment at both UC and CSU campuses be reduced to 40 percent of the undergraduate enrollment.

The landmark bill, AB 1725 (Vasconcellos, 1988), provides the legal mechanisms for community college reform. In its mission statement, the bill clearly:

> ...validates the comprehensive mission of the community colleges but clearly restricts the colleges from being all things to all people. New clarity and a structure of priorities are provided in the colleges' mission. Specific focus has been placed upon improving the transfer function and removing the barriers to transfer (p. 1).

California Studies on Transfers to Four-Year Institutions

Coordinating Council for Higher Education Study

In 1972, Senate Bill 772 assigned the new Coordinating Council for Higher Education the responsibility for conducting a study to see if the California Community Colleges were fulfilling their purpose and to examine the characteristics of students completing various types of community college programs. It was to be longitudinal, designed to examine the persistence and enrollment patterns among 34,245 new students enrolled in 32 California Community Colleges in the Fall of 1972. Between 1972 and 1974 three progress reports from this study were made to the legislature.

California Postsecondary Education Commission Replaces the Coordinating Council for Higher Education

In 1974, the California Coordinating Council was succeeded by the California Postsecondary Education Commission (CPEC). A new state agency, it was charged with advising the legislature and the governor on statewide educational policy and funding. CPEC took over and completed the study required by Senate Bill 772. In 1976, it published the final report, Through the Open Door, A Study of Patterns of Enrollment and Performance in California Community Colleges (CPEC, Report 76-1). The report concluded that the research model was based upon three invalid assumptions. First, it ignored the increasing numbers of community college students "whose objectives were achieved in non-traditional enrollment patterns who did not enroll from semester to semester in degree or certificate programs" (p. 9). Second, it assumed, incorrectly, that community college students became employed only after completing an occupational or transfer program. The third error was in sampling non-credit students. That portion of the study was consequently dropped because the non-credit classes offered by most colleges were in effect regular credit classes scheduled after 4:30 p.m.

In the study only 13 percent were full-time day students. Thirty-seven percent were part-time day students, and 50 percent were part-time evening students.

Only 40 percent of the sample were 21 years of age and under. The study found that the students least likely to continue were women between the ages of 22 and 29 and part-time evening and older transfer students. Twenty-five percent of the students were reported to have already attended a California four-year institution. This percentage might have been underestimated in the sample because many students do not declare that they have attended another institution, and many students move between institutions or are enrolled concurrently in a community college and a four-year college.

Seventy-two percent of the continuing students' grades were 2.0 and above. Thirty-one percent of them went on to another California Community College. Twenty-four percent went to a California State University or College. However, few were full-time transfer students. Only 9 percent went full-time to the University of California, while 4 percent went to the University of California Extension. Nine percent attended independent schools in California, and 8 percent out-of-state colleges and universities. The ratio of degrees and certificates for the persisters was 78 awards per 1,000 students. The enrollment pattern showed many students "enrolled part-time for one semester in order to satisfy some requirement or gain some skill which would help them in upper division and/or graduate work" (p. 35). According to the study, three-fourths of the one million students enrolled in

California Community Colleges had "patterns of enrollment and performance that did not fit the stereotype of the transfer or degree-oriented student (p. 6).

The Statewide Longitudinal Study, 1978-1981

In 1978, the California Community Colleges did not have individually or collectively the data to respond to the rising criticism that they were not performing their function either in vocational or transfer education. To respond to their critics and to learn about their students, the Community College State Chancellor's Office sponsored the Statewide Longitudinal Study (SLS, ED217917) a three-year longitudinal study of students funded through the federal Vocational Education Act. This study was the largest consortium-based study the California Community Colleges had ever done. Fifteen community colleges from the border of Mexico to Mt. Shasta participated in the study. Campuses represented rural, urban, and suburban populations with enrollments from 3,000 to 29,000 students. The subjects were representative of student ethnic and socioeconomic backgrounds in all 106 California Community Colleges. Los Angeles' Pierce College administered the study. M. Stephen Sheldon was project director, and Russell Hunter project administrator. The final report was completed in 1982.

In the Fall of 1978, a random sample of first-time students was selected. The students were tracked for six semesters. Information was secured from their college

records and up to five structured telephone interviews. At the end of the study there were 170 variables and 6,550 students.

According to Sheldon, all the sample students could be placed in three categories: transfer (37 percent), vocational (36 percent), and special interest (27 percent). However, these categories failed to present a clear picture of the diversity in motives, enrollment patterns, aspirations, and achievements. During the first year, Sheldon developed 18 student prototypes to which each student was assigned, and subsequently validated at the final interview. According to Sheldon, less than 8 percent of the students considered themselves misclassified.

SLS Student Prototype

1. The Full-Time Transfers (10.6 percent) represented both those who were eligible for the university from high school and those who had just missed eligibility.

2. The Part-Time Transfers (7.7 percent) were older than the full-time students and enrolled in three or fewer courses, usually in the evening.

3. The Undisciplined Transfers (9.3 percent) aspired to transfer, but had a low probability of doing so, lacking either the academic skills to complete their work or the self-discipline to follow through on studies and homework.

4. The Technical Transfer (7.7 percent) were indistinguishable from the full-time or part-time transfer students other than that they enrolled in, and completed, a sequence of courses in a high level vocational area.

5. The Intercollegiate Athletes (0.7 percent) were indistinguishable from the Undisciplined Transfer Students other than their prime motive for attendance--athletics.

6. The Financial Support Seekers (0.3 percent) were also indistinguishable from the Undisciplined Transfer Students who attended to get financial aid.

7. The Expediters' (0.7 percent) main academic affiliation was with a senior college but they found it convenient to take some courses at the community college.

8. The Program Completer (5.7 percent) enrolled in, and expected to complete, a vocational program.

9. The Job Seekers (13.5 percent) attended college only to learn enough to obtain a semi-skilled job.

10. The Job-Upgraders (12.3 percent) were already employed in the field in which they took courses and attending classes only to improve their skills or learn new, complementary skills.

11. The Career Changers (3.3 percent) were employed but wished to learn new job skills to change careers or to supplement their incomes by "moonlighting."

12. The License Maintainers (0.7 percent) were in careers that necessitated state licensing and required instruction on a regular basis to maintain the license.

13. The Leisure Skills Students (12.4 percent) were concerned with learning specific skills to pursue their hobbies, and attended vocational, individual sports, or artistic performance courses.

14. The Education Seekers (6.3 percent) felt a vague discomfort or guilt if they were not enrolled in a reasonably academic course.

15. The Art and Culture Students (1.0 percent) sought cultural experiences in courses such as art or music appreciation or humanities that might include attendance at concerts.

16. The Explorer/Experimenters (4.0 percent) attended community colleges primarily to study themselves and explore avenues of potential employment or a continuation of their education.

17. Basic Skills Students (2.9 percent), many of whom were recent immigrants whose goal was to learn or improve their English, attended a college to improve basic skills.

18. Lateral Transfers (0.8 percent) were taking courses prior to transferring to an institution other than a university or vocational program (pp. 9-12).

Thirty-seven percent of the SLS sample were assigned to one of seven transfer prototypes. About half were full-time or technical transfers, 28 percent undisciplined transfers, athletes, and financial aid seekers, and 22 percent part-time transfers or expediters.

According to Sheldon, at the time of the final interview, almost one-fourth of the full-time, part-time, and technical transfers contacted were attending a university. In the sixth semester of the study, an additional third indicated the high probability that they would transfer. Sheldon's only method of learning about a student's intent to transfer was through the interview contact. However, one-third of the sample was unreachable during the last year of the study.

Sheldon recommended Full-Time, Part-Time, and Technical Transfer prototypes be used in estimating the percent of students who transfer. According to Sheldon,

> Those who come to community colleges with a modicum of academic ability and the intent to transfer to the university represent about a quarter of first-time students in a fall semester. Of those, 50 percent to 60 percent will transfer (pp. 7-8).

Including students assigned to the Undisciplined Transfer and the Basic Skills prototypes in estimates of potential transfers was unrealistic, according to Sheldon. He stated he had seen "no evidence that high school graduates reading at the sixth grade level could be transformed into even a mediocre college freshman in a reasonable amount of time by a community college" (pp. 7-9).

According to Sheldon, the study showed transfer and vocational functions doing well when compared to student goals, abilities, and enrollment patterns. He concluded that the priorities for reduced state funds should be placed on these two functions and that basic skills and

leisure skills classes could be eliminated from the community colleges.

Sheldon's recommendation to remove adult education, basic skills, and leisure skills classes from community colleges reflected two hotly debated issues--state priorities for funding these classes and whether they should be offered by K-12 school districts or community colleges. It is important to remember that the SLS was done in the post-Proposition 13 era when funding had been reduced for all segments of higher education. Community colleges had lost local control over their district funds depending instead upon a new state formula. The report was completed at a critical political time for California Community Colleges, and the SLS results were widely disseminated and discussed and played an important role in the development of new policies.

Transfer Data Reported to California Community Colleges from the California Postsecondary Education Commission and the State Universities

Since 1982, the California Postsecondary Education Commission (CPEC, 1982-88) has reported aggregate data on fall transfers from community colleges to both state university systems. Prior to that, the University of California reported transfer student achievement to individual community colleges.

> However, the U.C. system suspended distribution of performance reports to the community colleges... from 1976 through 1978... in response to the Family Rights and Privacy Act. In the Fall of 1981, the U.C. system resumed their practice of reporting specific student

> data as well as reporting summary data (Paulson, 1984, p. 2).

Beginning in Fall, 1980, the California State University System began to issue summary reports to individual community colleges on the performance of their students. These reports provided average GPA of first-time transfer students after they attended for one year and were re-enrolled for the second year. It also separated regular admission students from those requiring special action.

The University of California summary reports were divided into the following categories: (1) students charged to the community college and eligible from high school, (2) students charged to the college and ineligible from high school, (3) students admitted by special action and eligible from high school, and (4) students admitted by special action and ineligible from high school. UC performance reports also showed GPAs of students who continued through the Spring quarter and identified the students who had met the Subject A English requirement.

Prior to these system-wide reports,

> ...each campus established its own reporting system, if any. Needless to say, this laissez faire practice provided sporadic, incomplete, and unreliable data. Evaluations of transfer student performance based upon these inadequate reports were questionable procedures (Paulson, 1984, p. 2).

A 1985 CPEC report, Reaffirming California's Commitment to Transfer (Report 85-15) shows the California Post-Secondary Education Commission was fully aware of the

incomplete data on the number and academic performance of UC and CSU transfers.

> While the numbers of transfer students may appear to be the kind of information about which the segments have the greatest certainty, problems of definition place limits on its reliability... The Commission obtains numbers from fall term enrollment tapes provided annually by the University and the State University on which last institution attended, high school, college or university should be coded for each new student. The code implies little about the amount of work completed at the last institution... This information on the flow of transfer students is of little use in the conceptualization of student flow, since Community College students take varying amounts of time and course work before moving to the University and the State University, thus making it impossible to monitor the progress of groups of Community College freshmen to the point of transfer (pp. 49-53).

The preceding statements from the CPEC study about the problems of definition and the partial transfer figures from the University and State University Fall enrollment reports makes it clear that the method of counting transfers has not been satisfactory. Complete figures on transfers from community colleges to State Universities have not been available. The problem of accurate crediting of transfer students to the Community College has been further complicated by the different methods used by UC and CSU to attribute entering students to their former schools. CSU attributes students to the last school attended regardless of the amount of work completed at the last school, and UC attributes to the high school they attended if they were eligible to go to UC from high school, regardless of the fact that the student may have transferred from a community college.

The frustration of the CPEC staff in not having adequate data on transfer students is evident. Reaffirming California's Commitment to Transfer also cited the serious problem of not having data on students:

> ... that do not persist to the baccalaureate degree, their academic standing when they drop out, or their reasons for doing so. Furthermore, numbers of students included in the performance reports cannot be reconciled with those obtained from enrollment tapes supplied to the commission because of differences in definitions used in the two kinds of reports, with the performance reports showing significantly smaller numbers of transfer students charged to Community Colleges than appear on the enrollment tapes (p. 53).

In 1983 an ad hoc committee was appointed by CPEC to again study the health of the transfer function performed by the California Community Colleges. Ed Tronass, Dean of Instruction at Citrus College, testified for the committee that while the transfer function was a top priority of the community colleges, it was not their only function. He stated that the Commission's update of community college transfer student statistics for Fall 1983 implied that the Citrus College transfer rate was less than 3 percent. This, he said, was because Fall transfers were compared to the total credit enrollment of Citrus College. According to Tronass,

> There are several things wrong with this type of statistic. First of all, the appendix in the Commission's report includes only fall transfer numbers. Second, the only base that should be used for calculating the transfer rate is the number of entering freshmen with a goal of transferring (Views from the Field on Community College Transfer CPEC Report 84-20, June 1984, expanded August 1984, p. 7).

Janis Cox Coffey of the Los Rios Community College District testified that only 55 percent of their student body were first-time college students, and only half that number "are likely to aspire to transfer" (p. 50). She also testified that full-time students were being replaced by part-time students who would take longer than two years to complete lower division work toward a baccalaureate degree. Over 70 percent of all the Los Rios students were employed, including over 69 percent of the first-time students.

Josue Hozos, Director of Special Programs and Services, College of San Mateo, testified at the same hearing concerning the housing problem for transfers brought about by the delayed notification of acceptance to UC. According to Hozos, community college transfers were being placed after high school graduates even if they qualified from high school while community college transfers with high GPAs were being denied admission at university college or department levels.

In testimony by Donald R. Gerth, President, California State University, Dominguez Hills and President designate, California State University Sacramento, reference was made to the perception that the Community Colleges were not vigorously carrying out their transfer function:

> Community Colleges serve the function of igniting the regeneration process for a major segment of our society. They must not be permitted to lose this function by being diverted to a "leisure industry provider."

> It may not matter very much if Community Colleges abandon recreational or human potential courses. It does matter very much if they become out of touch with production related imperatives of a high technology society (pp. 4-5).

Gerth pointed out that in some community colleges the transfer program and counseling for transfers had been severely weakened. In these institutions the focus was the open door rather than the rigors of advanced study. Gerth also argued that remedial and basic skills were a low priority at some community colleges and that "there needs to be a reawakening of interest in effective assessment, advising, and counseling of students. The transfer function in the California Community Colleges simply must receive attention and a restored sense of priority, even urgency" (pp. 4-5).

Published statements like the preceding testimony, coupled with the partial information in the CPEC Studies, although it was clearly stated as partial information, led to a popular misconception that the California Community Colleges had not been adequately performing their transfer function. Another CPEC study, Meeting the Cost of Attending College: A Staff Analysis of the Demographic Characteristics of California Undergraduates, done in early 1984 during the controversy over tuition at Community Colleges, heightened the perception. The data for the study were gathered by the California Student Aid Commission, which sent questionnaires to a 5 percent random sample of students at 24 Community Colleges considered to be

representative of the system as a whole. According to the Los Angeles Times:

> The typical California community college student is not a low income, minority youth, struggling to get an education while holding a job, but a relatively prosperous white woman who has returned to campus to sharpen her job skills or to pursue some personal interest. This surprising portrait has emerged from an analysis of the characteristics of community college students just completed by the California Postsecondary Education Commission, a state agency that advises both the Governor and the Legislature on higher education policy (December 11, 1984, p. 1).

The article states different views on the need for a restudy of the role of the community colleges and refers to the following questions raised by those who favor the study:

> Are the community colleges failing to prepare enough students to move on to four year colleges and universities, and, if so, what can be done about that? Should the community colleges continue to compete with public high school adult education classes or should these two programs be combined, as they are in San Francisco, San Diego, and a handful of other places in the state" (p. 3).

The Decade of Uncertainty

The decade from 1973 to 1983 was one of uncertainty for higher education in California. The transfer structure established by the 1960 Master Plan seemed to be at risk. Demographic studies showed California's growing minority population. CPEC studies showed a declining transfer rate from the Community Colleges to the UC and CSU systems. Despite California's increasing minority population, minority transfers were not increasing. Calls went to the legislature for a new master plan and a new

definition of the primary functions of the Community Colleges.

According to Prager (1988), there was a negative perception during the period that the growth of vocational programs in California Community Colleges had reduced the number of transfers to traditional liberal arts and science programs. The perception was due in large part to a study done by Kissler of UCLA, Trends Affecting Higher Education in California in the 1980's (1980). On October 16, 1980, Kissler, Chair of the University of California Systemwide Task Group on Retention and Transfer reported the findings of his task force to the University of California Regents. Kissler pointed out that Community College transfers to UC had dropped from 8,000 to less than 6,000 in four years. He also cited the increasing number of reverse transfers going from UC to Community Colleges. In the Fall of 1979 there were 10,000 students who had attended UC going to California Community Colleges. More than 5,000 of these former UC students had already completed a baccalaureate degree and "were probably taking a community college course to pursue a particular interest" (p. 2).

The data from Kissler's Student Choice Task Group showed that,

> In 1975, 23 percent of the high school graduates who were eligible for admission to the University of California chose to go to a community college. Now it is only 8 percent... today more students who want a

> baccalaureate are choosing to enter a four-year institution directly rather than following the transfer route (p. 6-7).

And because fewer students were transferring from community colleges, UC and CSU were admitting more students directly from high school.

Kissler claimed that fewer students transferring had caused a spiral effect reducing both the number of transfer courses in community colleges and the quality of the students. Removing the best students from transfer courses in community colleges had lowered the level of student performance. He cited as evidence the growing gap between the performance of community college transfers and UC native freshmen who became juniors.

Throughout the report, Kissler referred to the trend toward vocationalism and the growth of vocational programs competing for scarce community college funds. For example, over the past 20 years in the United States enrollment in vocational programs had gone from 13 to 50 percent, and "some estimates for California's community colleges have gone as high as 70 percent" (p. 5).

Kissler implied that the downward spiral of community college transfers to UC would have the following result:

> ...many community college campuses will articulate only with CSU campuses, because they will not be able to afford to offer the vocational and community service programs their students demand as well as the breadth and quality of program that will prepare students for the University of California (p. 14).

According to Cohen and Brawer (1982) and Prager (1988), the theory that the growth in vocational programs

at community colleges had adversely effected the transfer program overlooked the fact that four year colleges were "undergoing their own form of vocationalization" (Cohen & Brawer, 1982, p. 219). According to Prager, calls for the community college transfer function renewal "ignored growing evidence of transfer interest and activity on the part of career track students" (Prager, 1988, p. 83). The baccalaureate degree majors listed in both the UC and the CSU application forms strongly support Cohen and Brawer, and Prager's, points.

The Kissler study generated a great deal of discussion and debate because the decline in minority transfers from community colleges to four year schools was a national educational issue at the time. The high expectation of the sixties to provide minorities a gateway to higher education through the nation's community colleges was going largely unfulfilled.

In 1983 a petition was filed by the Mexican American Legal Defense and Education Fund against the University of California, the California State University, and the California Community Colleges. The petition claimed that minority students did not have a fair chance to transfer to UC and CSU. In fact, during the seventies, CPEC data showed that black and Hispanic students had not transferred to the state universities from the community colleges in large numbers, even though the number of Hispanics in the state population had increased.

Ford Foundation Urban Community College/Transfer Opportunities Program Studies

The Ford Foundation shared the national concern that minority students did not have equal opportunities to transfer to four year colleges and universities. In 1983 it created the Urban Community College/Transfer Opportunities Program (UCC/TOP) to investigate and improve transfer opportunities, particularly for urban minority students. Twenty-three community colleges with sizable minority populations were funded for three years to participate in a national effort to improve transfer rates on their campuses. Eight California Community Colleges participated in the program, four Los Angeles Community College District campuses (Los Angeles City, Los Angeles Harbor, Los Angeles Mission, and West Los Angeles), Laney College, Sacramento City College, and San Diego City College. Donovan, Schaier-Peleg, and Forer were authors of the 1987 final Ford Foundation Report on the program, Transfer: Making It Work (Report ED 281 579).

The report stressed the importance of interinstitutional dialogue and cooperation on curriculum, teaching strategies, and outcomes. Two year college and secondary school collaboration was also stressed. The following summarized recommendations for improving transfer are drawn from the report.

Student Follow-up and Data Collection

1. Community colleges should maintain a research office and collect comprehensive academic and personal information on newly admitted students including test scores.
2. Student academic progress should be monitored.
3. Studies should be conducted to identify student characteristics that result in successful transfer, as well as academic and support services that help students achieve their academic goals.
4. Follow-up studies of graduates and drop-outs should be conducted to explain patterns of student attrition.

Improving the Academic Environment

1. Mandatory placement for students in accordance with their abilities and achievements.
2. Exit testing.
3. Peer interaction to motivate students and reinforce academic values.
4. Faculty agreement on standards of literacy.
5. Community colleges should emphasize and reward faculty scholarship as well as effective teaching.

Responsive Support Services

1. Early identification and support of potential transfers.
2. Nonacademic needs of disadvantaged transfer students must be anticipated by counselors and faculty.

3. Community colleges should establish separate transfer centers and transfer counselors.
4. More counselor utilization of computer technology to evaluate student academic progress, course articulation, and facilitate career planning (pp. 70-74).

In 1986, Richardson and Bender published a report, Students in Urban Settings: Achieving the Baccalaureate Degree (Report ED 284 518). Although nationwide figures on community college transfer rates were not available at the time, they cited studies in several states, including California, that pointed to the declining number of community college students transferring to four-year colleges. The estimated between 5 and 15 percent of community college students transfer to four year colleges. They also found differences in the persistence of minority and white students. Some specific problems identified were:

1. The lack of strong policies between the two- and four-year schools articulating curricula, academic advising, recruitment, and student orientation.
2. Inadequate counseling.
3. Four-year colleges were less willing to accept courses and grades earned in community colleges because of differences in academic standards and requirements (pp. 2-3).

Individual California Community College Transfer Studies

Since Spring 1983, the Los Rios Community College District has conducted annual student follow-up surveys.

The adjusted response rate from 16,284 former students was 50.1 percent (7,564). The surveys were conducted eight months to one year after the students had completed their programs or left the Los Rios District. Students indicated college goals as University Transfer, Occupational Preparation, Occupational Retraining, or Personal Interest. Between 1983 and 1986, about one-third of all the respondents declared transfer as a goal. The author (Lee, 1987) stated that within one year after leaving a Los Rios College, 68 percent of the survey respondents had transferred to a four-year institution, and 17 percent were continuing their education at a community college (often in Los Rios) or at a school not identified. Seventy-two percent of the survey respondents who had enrolled primarily to prepare for a new job were employed in a field related to their training.

In 1985, the Los Rios Community College District (LRCCD) conducted a pilot study of transfer students jointly with California State University, Sacramento, (CSUS) and University of California, Davis (UCD), Moving On: A Pilot Study of Student Transfer (1985) followed 1,812 students who took course work at one of the three Los Rios Colleges (American River, Sacramento City, and Cosumnes River) before transferring to CSUS or UCD in the Fall of 1980. The study focused on transfer student characteristics, enrollment patterns, academic performance, and persistence at both the community college and

the universities. The study's senior author was Nancy Renkiewicz, Sacramento City College.

According to Renkiewicz, LRCCD transfer students continued their education and received degrees at approximately the same proportion as other transfer students and at a slightly higher percentage than undergraduates who began their studies at the university. The Los Rios Community Colleges were not receiving credit from the universities for preparing the students to transfer. "If all former LRCCD students who transferred to CSUS and UCD in Fall 1980 are counted, numbers of Los Rios transfers increase 41 percent (UCD) and 11 percent (CSUS) over the universities' official counts" (p. 22). According to Renkiewicz, the different methods used by UC and CSU to attribute students to previous schools attended results in inconsistent information. California State University, Sacramento, attributed students to the last school attended, regardless of the amount of work completed their. UCD attributed students to the school thought to be most responsible for establishing UCD eligibility.

In 1984, Ron Silverman of Santa Monica Community College found the same under-reporting of transfers from Santa Monica Community College to UCLA. Silverman reported his findings in Academic Success of Santa Monica Community College Transfers to UCLA (February 19, 1987), a paper presented at the meeting of the Southern California Community College Institutional Research Association.

Silverman studied the entire population, 168 students, who transferred in Fall 1983 from Santa Monica City College to UCLA. The purpose of his study was to determine whether or not the course-taking behavior of these students at the community college level affected their academic performance and hence their chances of academic survival at UCLA. Silverman found that the students' GPA at Santa Monica was a highly significant predictor of academic success at UCLA. He also found that students who had taken calculus at Santa Monica College tended to have higher GPAs at UCLA.

During the course of his study, Silverman discovered that the UC data reports had consistently under-reported the number of community college transfer students by not including those who transferred in the winter or spring. According to Silverman, in 1984, Santa Monica Community College transferred 34.8 percent more students than were reported by the UC data system. Transfers to UCLA from all other LA County community colleges were under-reported by 22.3 percent. The growing concern about the under-reporting of community college transfers to UC an CSU is reflected in a letter (Appendix B) from Jaime Salazar, Transfer Center Director, Southwestern College, to Dorothy Knoell, California Postsecondary Education Commission.

A different type of transfer study was conducted at Skyline Community College. Transfer science majors were the focus of a 17-year follow-up study by Case and Goth

(1987). Transfer Science Students: A 17 Year Follow-up Study Fall 1969 through Spring 1985 analyzed 540 students who had completed 40 units of lower division science training at Skyline College. They had completed chemistry 220 or Physics 250. The majors included life, physical, and earth science. Thirty percent of the respondents had transferred to San Francisco State University, 17 percent to UC Davis, and 15 percent to UC Berkeley.

Eighty percent of all employed respondents said their job related to their program of study at Skyline. Seventy-five of the respondents who were not currently in school were working in math or science-related fields. The majority of these respondents obtained their jobs after graduating from their transfer school. Ninety-six percent of the students were very satisfied to satisfied with their preparation for transfer as a science major. Science and math classes transferred according to Skyline's articulation agreements, and students did not have to repeat courses.

CHAPTER III

RESEARCH METHODOLOGY

Development of the Mt. San Antonio College Transfer Data Base

The purpose of the present research was to discover which variables students identified as being significant to their academic success.

The sample population for the study was drawn from a new transfer data base developed by the Mt. San Antonio College Information Services department. The data base was created through a cooperative effort between Mt. San Antonio College and the state universities. In 1985, Mt. San Antonio College established a research priority to develop a computerized transfer student data base. Its creation reflected a growing concern among California community colleges that information on student flow from their campuses to the state universities was incomplete. The universities agreed to compare Mt. San Antonio College total enrollment tapes against their enrollment records and to identify all students who had attended the universities. The University of California agreed to begin the comparison with the 1982 academic year. The California State University agreed to make the same comparison beginning with the summer of 1978. It was agreed by the

universities and Mt. San Antonio College that student records were confidential and to be used for research only.

Mt. San Antonio College Information Services developed a computer tape with all individual student records including name, student identification number (social security number) and transcript summary data including units earned and grade point average. The records on the tape began with summer 1978. A copy of the tape was sent to the University of California and the California State University. The universities agreed to compare the MSAC tapes against their enrollment records and identify all students who were attending or had attended the universities.

By 1987, the universities had compared the Mt. San Antonio College enrollment against their enrollment records and had identified the MSAC students who had or were attending their institutions. Both universities prepared computer tapes with individual student term records for each semester or quarter the student had attended the university. These tapes with the MSAC enrollment tape were returned to Mt. San Antonio College.

The Mt. San Antonio College Transfer Reporting System (MSACTRS) was designed by MSAC Information Services to analyze the data from the enrollment tapes.

To merge and analyze the UC data, Restructured Executive Executor (REXX), an interpretive language, was used

on the IBM mainframe computer and the Statistical Package for the Social Sciences (SPSS). To merge and analyze the CSU data, the REXX and Structured Query Language (SQL), a data base access language, was used. The system merged the student records from the universities with their Mt. San Antonio College records. The institution of origin for each student in the transfer reporting system was selected from the earliest term CSU and UC reported the student attended their institutions.

The Study Population, the Survey, and Data Collection

Since the purpose of the present research was to discover which variables students identified as being significant to their academic success, it became necessary to sample students who had spent sufficient time at Mt. San Antonio College to judge their experience at the college and compare it to their university experience. The sample was drawn from the new data base of students who had completed 24 or more units at Mt. San Antonio College before transferring to the University of California or the California State University.

UC Sample

The Mt. San Antonio College Transfer Reporting System identified 1,183 students who had transferred to the UC system from 1982 through 1985. Twenty-four percent, 279 of these students, had completed 24 or more units at MSAC. Eleven percent, 32 of these, were reverse transfers or students who had attended an intermediate institution

before coming to MSAC. The remaining 247 students had completed 24 or more units before transferring to UC. This entire population was used as the sample. After students who could not be reached by mail or telephone were removed from the sample, the adjusted response rate for the UC respondents was 72 percent.

CSU Sample

The Mt. San Antonio College Transfer Reporting System identified 13,354 CSU students who had completed 24 or more units at MSAC during the period from 1978 to1987. However, only 6,276 of these students had attended MSAC first before transferring to a California State University campus. The CSU sample was drawn from these 6,276 students whose earliest dated record was Mt. San Antonio College.

Two samples were drawn from this population of 6,276 students sorted in their student ID number sequence (social security number). The first sample started with the first social security number and selected every tenth. The second sample started with the second social security number and selected every tenth. Transcripts for students who were included in the two samples were printed and read to further verify that the students in the samples were not reverse transfers. After the two CSU samples were pulled from the MSACTRS data base, the following information for each student in the sample was merged into the CSU sample file: student ID number, birth date, age first

and last attended MSAC, number of units completed, student address, and telephone number. The same information on each student in the UC sample was merged into the UC sample file. Fifty-five percent of the CSU transfers who received the survey responded.

The Survey

The information used to develop the study survey was gathered from a wide variety of sources. Survey instruments used in previous studies were reviewed including those of Knoell and Medsker (1965), Case and Goth (1987), Lee (1984-86), Pollard (1983) and Booth (1987). The characteristics of outstanding college instructors identified by Parker and Magnesen (1986) were used to develop the questions as to what degree the faculty or instructional programs were important in helping students reach their academic goals at Mt. San Antonio College and the universities after they transferred. Discussions with faculty, staff and students at Mt. San Antonio College and California State Polytechnic University, Pomona were an important source for the development of questions on student services and campus programs. The study survey (Appendix C) was developed and field tested on a group of MSAC students who had transferred to California State Polytechnic University, Pomona. Letters were sent from the College and School Relations Office to former MSAC students who had transferred to California State Polytechnic University, Pomona. The letter asked the

students to participate in a field test of the survey. The researcher met the students at California State Polytechnic University, Pomona on two different days. The field test was positive. The questions were clear, and the students had no difficulty responding. The only question the students seemed concerned about was their age. They made comments such as, "I am older because I am a part-time student." Since student age and ethnicity were already part of the transfer data base, it was decided not to ask for this information on the survey. None of the students in the field test were part of the study.

Data Collection

The survey with a personalized letter (Appendix D) from Mt. San Antonio College President District Superintendent was mailed to each student with a stamped return envelope. Surveys returned with forwarding addresses were sent to the new address. A follow-up post card was sent to students who did not return the survey within three weeks. Students who had not responded were telephoned, and additional surveys were mailed to those who requested them. Students whose telephone numbers were no longer in service were removed from the sample. Relatives notified the college that two students were deceased.

It was discovered through the telephone calls that a number of students had not received the survey because they had been living temporarily in the district while they attended Mt. San Antonio College. Some lived with

relatives or friends. In all cases when a telephone contact produced a new address the letter and the survey were mailed to the student. An additional effort was made to reach students through the UC or CSU campus where they had transferred. Letters requesting student addresses were sent to university registrars. This method was not too effective in producing new addresses, because some students had requested their addresses not be given out.

Data Analysis

An SPSS-X program for the IBM mainframe computer was written to analyze the data. Before the data were entered into the SPSS computer file for analysis, the researcher put the student's identification number (social security number) on each survey and added coding to questions 5, 6, 11, and the last open-ended question. The college majors listed by students for question 5 were coded with the UC and CSU major codes. The current occupation listed by the student for question 6 was coded from an occupational list prepared for the study. Student responses to question 11, "please list the languages spoken in your home when you were a child," were coded for the computer (1) English, (2) Spanish only, (3) bilingual and (4) non-English.

Responses to the open ended question, "please take time to share any feelings you wish to about the role MSAC played in helping you reach your academic goals," were put into a computer file. Three hundred and sixty-one (76

percent) of the CSU transfers and 76 (67 percent) of the UC transfers wrote responses. After reading all the responses, the researcher developed the following response categories:

1. Vital link to higher education.
2. Affordable education close to home.
3. Helped me decide major and career goals.
4. High quality, accessibility, and helpfulness of faculty/staff.
5. Confidence/motivation to go on.
6. Helped develop basic skills to go on.
7. Opportunity to complete general education requirements before transferring.
8. Academic work at MSAC did not prepare me for UC or CSU.
9. MSAC counselors/academic advisors helped me.
10. MSAC counselors did not help me.
11. Other.

Three outside evaluators read the written responses and placed them in the categories. After the coding was completed the data from each survey was entered into the SPSS CSU and UC study file on the Mt. San Antonio College 4381 IBM mainframe computer.

CHAPTER IV

FINDINGS

Enrollment Tape Analysis and Survey Respondents' Demographics

Chapter IV presents a brief analysis of the Mt. San Antonio College Transfer Reporting System (MSACTRS) enrollment tapes that provided the data base for the study. The analysis is followed by a demographic profile of the survey respondents. The profile includes their ethnicity, gender, age, academic goals, major, degrees, employment, parents' education, home language, and early home and school literacy environment.

Enrollment Tape Analyses

From the Mt. San Antonio College (MSAC) enrollment tapes the California State University identified 22,086 students who had attended a CSU campus from Summer 1978 through Spring 1987. The University of California identified 1,183 students from the MSAC enrollment tapes who attended a UC campus between 1982 and 1985. The analysis of the enrollment tapes verified that transfers from MSAC had been under-reported. The annual CPEC reports of fall transfers from Mt. San Antonio College to CSU and UC had shown only a fraction of the students that had gone between these institutions. Major problems existed with

the UC and CSU reporting format to the California Post Secondary Education Commission. Both systems reported fall transfer data only. Many MSAC students had transferred in the winter, spring, or summer.

The Mt. San Antonio College Transfer Reporting System (MSACTRS) analysis of the CSU enrollment data (Appendix E) shows that only 7,289 (33 percent) of the MSAC students who attended CSU were identified as transfers from Mt. San Antonio College. The remaining 14,797 were credited to high schools, other community colleges, and state universities. Table 1 figures from the Mt. San Antonio College Transfer Reporting System (MSACTRS) show the unduplicated count by academic year of MSAC students identified by CSU on the enrollment tapes who were attending CSU campuses from Summer 1978 through Spring 1987.

There are two sets of figures, one for all students and one for those with MSAC origin code. Students with MSAC origin code were those credited by CSU as having transferred from Mt. San Antonio College. Students not credited to MSAC were credited to other community colleges, high schools, state and private colleges, and universities. CSU credited the last institution the student attended as the student's institution of origin regardless of the amount of course work taken at that institution. The institutions the MSAC students were credited to are listed in Appendix E.

Table 2 shows the fall CSU transfer figures for Mt. San Antonio College reported in the CPEC 1986 Update of Community College Transfer Statistics report.

The CPEC figures for fall transfers did not relate to those from the enrollment tapes because they included all former MSAC students attending CSU, not just fall transfers reported to CPEC by the California State University. Another reason the figures are not comparable is that students who enrolled in a fall quarter or semester at a California State University were not reported as a transfer to CPEC until after they re-enrolled at CSU the following fall quarter or semester. A further analysis of the data was made through MSACTRS of the CSU transfer count for each academic year for first term students with MSAC origin codes.

TABLE 1

MSAC STUDENTS ATTENDING CSU
SUMMER 1978-SPRING 1987
MSAC TRANSFER REPORTING SYSTEM

Year	All MSAC Students	MSAC Origin Code
1978-79	4745	843
1979-80	5668	1359
1980-81	6492	1752
1981-82	6864	2024
1982-83	7199	2266
1983-84	7503	2499
1984-85	7656	2708
1985-86	7792	2896
1986-87	7626	3042

Source: MSACTRS, 1987.

TABLE 2

CSU FALL TRANSFER FIGURES FOR MSAC STUDENTS
CPEC UPDATE

1979	520
1981	495
1982	567
1983	583
1984	595
1985	610
1986	560

Source: California Postsecondary Education Commission, 1986.

Table 3 shows the total number of students with MSAC origin code who first attended a CSU campus during the academic year from 1978-79 through 1986-87. Though the annual count of first term students with MSAC origin code is more closely related to the CPEC figures, this count fails to include the students who attended MSAC but were credited to an intermediate institution of origin. There is presently no system to track the significant movement of these students from one educational institution to another.

The figures from the MSACTRS and CPEC illustrate the complexity of attempting to analyze the movement of students between educational institutions. California does not have a system to track students from one community college to another or to public and private four-year colleges and universities. The problem of tracking transfers is further complicated by the fact that the University of California and the California State University do not use the same system to credit transfers to the

community colleges and report them to the California Post-secondary Education Commission.

Table 4 shows the number of transfers from MSAC to UC between 1982 and 1985. It compares the number of Fall transfers from the CPEC reports.

TABLE 3

STUDENT TRANSFERS TO CSU
1978-1987

1978-79	838
1979-80	784
1980-81	766
1981-82	747
1982-83	785
1983-84	818
1984-85	851
1985-86	882
1986-87	818

Source: California Postsecondary Education Commission.

TABLE 4

MSAC TRANSFERS TO UC SYSTEM
1982-1985

The Number of MSAC Students Identified by MSACTRS	CPEC Fall Transfer Report
1982 307	36
1983 299	36
1984 328	57
1985 249	43

Source: MSACTRS. Source: CPEC

The Mt. San Antonio College Transfer Reporting System provided the first opportunity for detailed analysis of student movement between high school, two year and four-year public educational institutions. The picture it presents of MSAC transfer students illustrates the

convoluted path the majority of these transfers took to reach their educational goals. For example, analysis of the enrollment tapes showed only 33 percent of the former MSAC students who attended CSU and only 14.5 percent who attended UC were credited as having attended Mt. San Antonio College. The majority were credited to other community colleges, high schools, and state universities.

Institutions of Origin for MSAC Transfers to CSU

The institutions of origin for MSAC transfers to CSU with the gender and ethnic distribution of the students are listed for the entire CSU transfer population in Appendix E and for the transfers who completed 24 or more units at MSAC in Appendix F. These lists illustrate the complexity of the problem of tracking and crediting community college transfers to the institution where they prepared to transfer. The 13,354 students shown in Appendix F had all completed 24 or more units at MSAC but only 6,276 of them were credited to MSAC as the institution of origin by the California State University. The remaining 7,078 were credited to other institutions. Table 5 shows these institutions.

Twelve Largest Intermediate Campuses Credited with Largest Number of MSAC Transfers to CSU

Table 6 shows data from the twelve intermediate campuses that were credited with the highest number of MSAC transfers to CSU. The table shows some significant

differences between the gender and ethnicity of the MSAC transfers who attended an intermediate campus.

The twelve intermediate campuses with the largest number of MSAC transfers were eight community colleges, two California State Universities, and the University of

TABLE 5

INSTITUTIONS CREDITED BY CSU AS HAVING TRANSFERRED STUDENTS WHO COMPLETED 24 OR MORE UNITS AT MSAC

3132	Credited to 51 California Community Colleges (other than MSAC)
838	Credited to 15 CSU campuses
285	Credited to 7 UC campuses
293	Credited to 10 private California colleges and universities
888	Credited to 27 public high schools
140	Credited to 6 private high schools
364	Credited to 18 out of state schools
29	Credited to 2 out of the country schools
11	Credited to 1 California high school outside L.A. County.
23	Credited to 2 university extensions
14	Institution unknown
1061	Institutions with less than 10 students
7078	

Source: MSACTRS.

California at Los Angeles. The California State University credited their entering students to the last educational institution they attended regardless of how many

units they completed at that institution. Because many of the MSAC transfers went to an intermediate institution before attending CSU, they were not credited to Mt. San Antonio College. The tape analysis also showed that a significant percent of the students who completed 24 or more units at MSAC were reverse transfers from CSU. The UC and CSU comparison of the MSAC enrollment tapes showed 67 percent of the MSAC students who had attended the universities had not been credited to Mt. San Antonio College.

The Gender and Ethnic Background of MSAC Transfers Who Attended an Intermediate Institution

The gender and ethnic background of these students is illustrated on Table 6. Six of the intermediate community colleges and CSU, Pomona, averaged a 3.9 percent higher ratio of males to females. East Los Angeles Community College had the greatest difference--61.8 percent male to 38.2 percent female. The UCLA students reversed this percent with 59.3 percent female and 40.7 percent male.

Five intermediate community colleges and UCLA had a higher percent of Asians. The highest was Los Angeles City College with 31.3 percent. Two intermediate campuses had a higher percentage of Black students--Los Angeles City College, 25.3 percent, and UCLA, 9.9 percent. Three community colleges (Rio Hondo, East Los Angeles, and Los Angeles City) and CSU Fullerton had a higher percentage of Hispanics. The highest was Rio Hondo (38.9 percent).

TABLE 6

TWELVE INTERMEDIATE CAMPUSES CREDITED WITH
THE LARGEST NUMBER OF MSAC TRANSFERS TO CSU

	Total	Male	Fem.	Asian	Black	Hisp.	White	Other
				Community Colleges				
		%	%	%	%	%	%	%
Citrus	459	51.4	48.6	7.0	4.8	10.5	60.3	17.4
Chaffey	417	50.6	49.4	7.0	5.3	14.4	59.7	13.7
Rio Hondo	234	57.3	42.7	8.9	1.3	38.9	37.6	17.9
East L.A.	199	61.8	38.2	16.1	5.0	38.2	17.1	23.6
Pasadena City	191	51.3	48.7	10.5	3.7	11.5	57.1	17.3
Fullerton Jr.	183	53.0	47.0	10.3	0.0	9.3	68.3	12.1
L.A. City	99	52.5	47.5	31.3	25.3	16.2	9.1	18.2
Orange Coast	92	56.5	43.5	10.9	3.3	3.3	75.0	7.6
				State Universities				
		%	%	%	%	%	%	%
CSU Pomona	206	54.9	45.1	8.8	5.3	10.7	57.3	17.9
CSU Fullerton	183	50.3	49.7	7.0	3.3	15.3	55.7	18.6
				University of California at Los Angeles				
		%	%	%	%	%	%	%
UCLA	91	40.7	59.3	23.1	9.9	11.0	40.7	15.4

Five community colleges and CSU Pomona had a higher percent of White students. The percent of Other was higher at six community colleges, CSU, Pomona; CSU, Fullerton; and UCLA.

Survey Respondents' Demographics--Ethnicity and Gender, CSU Transfers

Table 7 describes the ethnicity and gender of the CSU study population, the random sample, and the respondents. For the present study, the ethnic codes were established as Asian, Black, Hispanic, White, and Other. The Other category included American Indian, Alaskan Native, East Indian, Pakistani, Other, and Declined to State. The decision to use these categories was based on the fact that the California State University, the University of California, and Mt. San Antonio College used different ethnic categories.

Ethnicity and Gender of UC Transfers

Table 8 is a crosstabulation by gender and ethnicity of the total MSAC transfer population to UC, the subpopulation who completed 24 or more units, and the survey respondents.

Age Survey Respondents First and Last Attended MSAC

Table 9 compares the age of CSU and UC transfers who completed 24 or more units their first and last semester at Mt. San Antonio College. The average age for first semester females was 21.8 years and for males 19.8 with a

TABLE 7

CROSSTABULATION MSAC POPULATION
CSU TRANSFERS BY GENDER AND ETHNICITY

Total CSU from MSAC Transfer Population

	Ethnicity					Row Total	%
	Asian	Black	Hispanic	White	Other		
M	1,276	585	1,590	5,413	1,820	10,684	48.4
F	1,126	797	1,555	6,221	1,703	11,402	51.6
Tot.	2,402	1,382	3,145	11,634	3,523	22,086	
%	10.9	6.3	14.2	52.7	16.0		100

Random Sample Study Population CSU
Transfers Completing 24 or More Units at MSAC

	Ethnicity					Row Total	%
	Asian	Black	Hispanic	White	Other		
M	75	31	92	400	122	720	50
F	48	38	96	437	99	718	50
Tot.	123	69	188	837	221	1,438	
%	8.6	4.8	13.0	58.2	15.4		100

Survey Respondents

	Ethnicity					Row Total	%
	Asian	Black	Hispanic	White	Other		
M	21	9	28	112	35	205	43.2
F	16	10	25	181	37	269	56.8
Tot.	37	19	53	293	72	474	
%	7.8	4.0	11.2	61.8	15.2		100

minimum age of 16 years for females and 17 years for males. The maximum age of 63 for females and 61 for males illustrates the long age range for this population. The UC transfer population was younger. The average age for first semester females was 18.2 years and for males 18.8 years, with a minimum age for both males and females of 16 years.

The maximum age for first semester UC transfers at MSAC was 45 years for females and 21 for males. The table shows female CSU transfers averaged 2.1 years older their last semester at MSAC than the males. Female transfers to UC averaged 3 years older than males their last semester at MSAC. The age range for the last semester UC females attended MSAC was 20 to 51 years and 19 to 27 for males. Female CSU transfers averaged four years longer at MSAC than the males. Female UC transfers averaged two years longer at MSAC than males.

The number of years each group of transfers spent at MSAC shows an enrollment pattern of students who took much longer than the traditional two years to transfer to a four-year college. The male CSU survey respondents averaged 5.9 years at MSAC, and the females averaged 6.3. The UC male survey respondents averaged 3.3 years and the females 3.5.

TABLE 8

CROSSTABULATION MSAC POPULATION
UC TRANSFERS BY GENDER AND ETHNICITY

Total MSAC Transfer Population

	Ethnicity					Row Total	%
	Asian	Black	Hispanic	White	Other		
M	179	26	107	226	32	570	48.2
F	173	33	94	275	38	613	51.8
Tot.	352	59	201	501	70	1,183	
%	29.8	5.0	17.0	42.3	5.9		100

Subpopulation Completing 24 or More Units at MSAC

	Ethnicity					Row Total	%
	Asian	Black	Hispanic	White	Other		
M	23	8	33	64	6	134	50
F	14	4	21	65	9	113	50
Tot.	37	12	54	129	15	247	
%	15.0	5.0	21.8	52.2	6.0		100

Survey Respondents

	Ethnicity					Row Total	%
	Asian	Black	Hispanic	White	Other		
M	7	1	15	24	6	53	46.5
F	6	2	14	37	2	61	53.5
Tot.	13	3	29	61	8	114	
%	11.0	3.0	25.0	54.0	7.0		100

TABLE 9

THE AGE CSU, UC TRANSFERS
FIRST AND LAST ATTENDED MSAC

Transfers 24 or More Units	CSU		UC	
	M	F	M	F
Average Age First Semester at MSAC	19.8	21.8	18.8	18.2
Minimum Age	17	16	16	16
Maximum Age	61	63	21	45
Average Age Last Semester at MSAC	25.9	28.0	22.0	22.3
Minimum Age	19	19	19	20
Maximum Age	65	63	27	51

Survey Respondents	CSU		UC	
	M	F	M	F
Age First Semester at MSAC	19.8	21.8	18.8	18.2
Minimum Age	16	16	16	16
Maximum Age	61	63	21	45
Age Last Semester at MSAC	25.9	28.0	22.0	22.3
Minimum Age	19	19	19	19
Maximum Age	64	63	27	51
Average Number Years at MSAC	5.9	6.3	3.3	3.5

The Table 10 comparison of CSU and UC survey respondents' reported high school graduation dates shows the broad age range of these transfers. It also shows that a number of them did not go directly from high school to Mt. San Antonio College. The CSU students transferred from MSAC between summer 1978 and spring 1987. The UC students transferred from MSAC between 1982 and 1985.

TABLE 10

SURVEY RESPONDENTS' HIGH SCHOOL GRADUATION DATE

CSU	N	%	UC	N	%
1936-1946	4	.9	1936-1946	0	0
1947-1957	20	4.4	1947-1957	1	.9
1958-1968	51	11.3	1958-1968	0	0
1969-1979	238	52.7	1969-1979	30	27.3
1980-1986	139	30.7	1980-1985	79	71.8
Total	452	100.0		110	100.0
No Response	22	4.6		4	3.5

High Schools Attended by Survey Respondents

Table 11 shows the majority of CSU and UC survey respondents attended high school in the MSAC District. Fifty-seven percent of the CSU transfers and 69 percent of the UC transfers attended public district high schools. Seven percent of the CSU transfers and 4.5 percent of the UC transfers attended a private district high school. More CSU transfers (31.4 percent) attended out of district high schools, and more UC transfers (5 percent) attended high schools outside the United States.

Survey Respondents' Academic Goals at MSAC

Table 12 compares the academic goals of the CSU and UC survey respondents when they entered Mt. San Antonio College. The majority of both groups--69.9 percent of the CSU and 73.7 percent of the UC transfers--started MSAC with the academic goal of earning a Bachelor's degree. In contrast to 48 percent of the CSU transfers, 63.7 percent

TABLE 11

HIGH SCHOOLS ATTENDED BY
CSU, UC TRANSFERS

District Public High Schools	CSU	%	UC	%	Total
Baldwin Park	8	1.7	1	.9	9
Bassett	6	1.3	1	.9	7
Bonita	13	2.7	5	4.4	18
Charter Oak	12	2.5			12
Covina	20	4.2	4	3.5	24
Diamond Bar			1	.9	1
Edgewood	13	2.7	2	1.8	15
Ganesha	10	2.1	5	4.4	15
Garey	6	1.3			6
La Puente	5	1.1	1	.9	6
Los Altos	19	4.0	9	7.9	28
Nogales	5	1.1	2	1.8	7
North Park Cont.	1	.2			1
North View	8	1.7	2	1.8	10
Pomona	12	2.5	4	3.5	16
Rowland	9	1.9	5	4.4	14
Royal Oak	15	3.2	2	1.8	17
San Dimas	8	1.7	1	.9	9
Sierra Vista	1	.2	1	.9	2
South Hills	15	3.2	12	10.5	27
Valley Cont.	1	.2			1
Walnut	20	4.2	6	5.3	26
West Covina	20	4.2	4	3.5	24
Wilson	31	6.5	10	8.8	41
Workman	3	.8			4
Total	262	57.0	78	69.0	340
District Private High Schools					
Bishop Amat	20	4.2	2	1.8	22
Damien	8	1.7	2	1.8	10
Lutheran	1	.2			1
Pomona Catholic	4	.8	1	.9	5
Western Christian	1	.2			1
Total	34	7.0	5	4.5	39
Out of District High Schools	148	31.4	24	21.0	190
High Schools Outside U.S.	16	3.0	6	5.0	22
Total No Response	11	2.3	1	.9	12

of the UC transfers wanted to earn a Bachelor's degree or higher. Only 20.9 percent of the UC transfers included the Associate degree in their academic goals, in contrast to 40.2 percent of the CSU transfers. More UC transfers (13.6 percent) than CSU transfers (9.6 percent) reported being undecided when they entered MSAC about their educational goals.

CSU and UC Campuses Attended by MSAC Transfers

Table 13 shows the highest number of CSU respondents transferred to the CSU campuses closest to Mt. San Antonio College. The largest number (222) transferred to CSU Pomona which is next door to MSAC. The second largest group (122) went to CSU Fullerton, approximately fifteen miles away. Eleven percent of the CSU transfers attended another California State University campus, and .6 percent attended a third campus.

The largest number of UC transfers (26.3 percent) went to UCLA, the second highest number (22.0 percent) transferred to Irvine, followed by 18.4 percent to UC Riverside and 14 percent to UC Santa Barbara.

Majors and Degrees Earned by Survey Respondents

Tables 14 and 15 summarize the degrees earned reported by the CSU and the UC survey respondents. Bachelors degrees earned were reported by 72.8 percent of the UC and 59.7 percent of the CSU respondents. Masters

TABLE 12

ACADEMIC GOAL AT MT. SAN ANTONIO COLLEGE

	CSU Transfers	%	UC Transfers	%
Bachelors or Higher	223	48.0	70	63.7
Assoc. and Bachelors	102	21.9	11	10.0
AA/AS	85	18.3	12	10.9
Certificate	5	1.1	1	.9
Job Skill	5	1.1	1	.9
Undecided	45	9.6	15	13.6
Total	465	100.0	110	100.0
No Response	9	1.9	4	3.5
N =	474		114	

degrees were reported by 5.9 of the CSU and 4.4 percent of the UC respondents. Over 22 percent (22.8) of the UC respondents and 14.6 percent of the CSU respondents reported still being undergraduates. More UC students (18.4 percent) reported being graduate students. Only 5.7 percent of the CSU respondents reported being in graduate school. Nineteen percent of the CSU and 4.4 percent of the UC respondents reported no longer being in school to complete their bachelors degree. Females received more Bachelors of Arts degrees at both UC and CSU, fewer Bachelor of Science degrees at UC, and the same number as the males reported from CSU. Females earned a total of

TABLE 13

CSU, UC CAMPUSES ATTENDED
BY MSAC TRANSFERS

Campus	Number	%
CSU Transfers' First Campus Attended (N=474)		
Bakersfield	1	.2
Chico	1	.2
Fresno	2	.4
Fullerton	122	25.7
Humbolt	5	1.1
Hayward	2	.4
Los Angeles	48	10.1
Long Beach	22	4.6
Northridge	3	.6
Pomona	222	46.8
San Bernardino	4	.8
San Diego	15	3.2
San Francisco	2	.4
San Jose	2	.4
San Luis Obispo	5	1.1
Total	456	96.2
No Response	18	3.8
Grand Total	474	100.0
CSU Transfers' Second Campus Attended (N=474)		
Bakersfield	1	.2
Fullerton	9	1.9
Los Angeles	7	1.5
Long Beach	7	1.5
Northridge	2	.4
Pomona	13	1.7
San Bernardino	5	1.1
San Diego	2	.4
San Jose	3	.6
San Luis Obispo	1	.2
UC Irvine	1	.2
UC Riverside	1	.2
Total	52	11.0
No Response	422	89.0
Grand Total	474	100.0
CSU Transfers' Third Campus Attended (N=474)		
Dominguez Hills	1	.2
Pomona	2	.4
Total	3	.6
No Response	471	99.4
Grand Total	474	100.0

TABLE 13, cont.

Campus	Number	%
UC Transfers' First Campus Attended (N=114)		
Berkeley	4	3.5
Davis	2	1.8
Irvine	25	22.0
Los Angeles	30	26.3
Riverside	21	18.4
Santa Barbara	16	14.0
Santa Cruz	4	3.5
San Diego	7	6.1
Total	109	95.6
No Response	5	4.4
Grand Total	114	100.0
UC Transfers' Second Campus Attended (N=114)		
CSU Fullerton	1	.9
CSU Pomona	2	1.8
Berkeley	2	1.8
Los Angeles	3	2.6
San Francisco	1	.9
Total	9	.9
No Response	105	92.0
Grand Total	114	100.0

TABLE 14

DEGREES EARNED BY
CSU SURVEY RESPONDENTS

CSU Transfers' Educational Status	No.	%	Number Earned MSAC	%
(N=474)				
Certificates	64	14.0	44	69.0
A.A. Degree	209	44.0	206	98.6
A.S. Degree	83	18.0	79	95.0
B.A. Degree	131	27.6		
B.S. Degree	152	32.1		
Master's Degree	28	5.9		
Undergraduate Stdnt	69	14.6		
Graduate Student	27	5.7		
No Longer Student Did Not Complete Bachelors	90	19.0		

	Female	Male	Total
B.A.	79	52	131
B.S.	76	76	152
Total Bachelors	165	128	393
Masters	14	14	28

TABLE 15

MAJORS AND DEGREES EARNED BY
UC SURVEY RESPONDENTS

UC Transfers' Educational Status (N=114)	No.	%	Number Earned MSAC	%
Certificates	9	7.9	6	66.7
A.A. Degree	31	27.2	30	99.9
A.S. Degree	8	7.0	8	100.0
B.A. Degree	53	46.5		
B.S. Degree	30	26.3		
Masters Degree	5	4.4		
Undergrad. Degree	26	22.8		
Graduate Student	21	18.4		
No Longer Student Did Not Complete Bachelors	5	4.4		

	Female	Male	Total
B.A. or A.B.	30	23	53
B.S.	11	19	30
Total Bachelors	41	42	82
Masters	1	4	5

206 bachelors and 15 masters degrees. Males earned a total of 170 bachelors and 18 masters degrees.

Appendix G lists the majors reported by CSU and UC respondents. Over 60 percent (60.3) of the female and 39.7 percent of the male CSU respondents reported Bachelor of Arts majors. Fifty percent of the male and the female CSU respondents listed Bachelor of Science majors. The highest number of majors listed for both were Business Administration and Accounting. One CSU transfer reported receiving a BA/BS in Mathematics from UC Riverside, and one was in a doctoral program at UC San Diego. Appendix G shows a relatively even distribution of UC majors reported by males and females, with the exception of Psychology. Five females and one male UC respondent reported receiving their degrees from CSU.

Current Occupations of Survey Respondents

Table 16 lists the current occupations reported by the CSU and UC survey respondents. More UC transfers (18.3 percent) than CSU transfers (8.6 percent) reported being full time students. Over 11 percent (11.9) of the UC students reported being full time graduate students versus 3 percent of the CSU transfers. Only 1.9 percent of the CSU and 2.8 percent of the UC transfers reported themselves as being unemployed. The largest number of former CSU students (22.3 percent) were in business. The second highest number (13.3 percent) were in education. The third (9.2 percent) were in finance, and the fourth

TABLE 16

CURRENT OCCUPATIONS, CSU/UC TRANSFERS

	CSU (N=474)	%	UC (N=114)	%
Full time student	40	8.6	20	18.3
Employed student	29	6.2	6	5.5
Full time grad. student	14	3.0	13	11.9
Employed grad. student	13	2.8	8	7.3
Agriculture	2	.4	0	0
Artist	0	0	1	.9
Arts	4	.9	2	1.8
Aviation	8	1.7	1	.9
Business	104	22.3	16	14.7
Communications/media	9	1.9	2	1.8
Computer technology	19	4.1	1	.9
Design	9	1.9	2	1.8
Education	62	13.3	9	8.2
Electronics	10	2.1	0	0
Engineer	19	4.1	1	.9
Finance	43	9.2	9	8.2
Government	19	4.1	1	.9
Homemaker/mother	11	2.3	3	2.7
Legal	2	.4	1	.9
Medical	34	7.3	7	6.4
Natural science	1	.2	3	2.8
Photography	2	.4	0	0
Unemployed	9	1.9	3	2.8
Writer	4	.9	0	0
Total	466	100.0	109	100.0
No Response	7	1.5	5	4.4

(7.3 percent) were in medical occupations. Business was also the number one occupation for the UC respondents, education and finance tied for second, and the third most listed occupation was in the medical field.

Survey Respondents' Employment While Attending MSAC and CSU, UC

One hundred of the UC transfers (87.7 percent) said they were employed while attending Mt. San Antonio College. Only fourteen (12.3 percent) were not employed.

The response was the same from the CSU transfers. Four hundred eight (86 percent) said they were employed, and only 66 (13.9 percent) indicated they were not employed while attending MSAC. After they transferred from MSAC, 80 percent of the students were employed while they attended CSU, and 75 percent were employed while they attended UC.

Survey respondents who were employed were asked to indicate how many hours per week they worked while attending Mt. San Antonio College and the universities. Tables 17 and 18 show that 29.7 percent of the CSU transfers worked 30 or more hours per week while they attended MSAC. After these students transferred to CSU, more of them (30.2 percent) reported working 21 to 30 hours per week, and 36 percent reported working over 30 hours per week. The work pattern for UC transfers was different. Thirty-three percent reported working 21 to 30 hours per week, and 21 percent reported working over 30 hours while attending MSAC. This percentage dropped in both categories to 26.7 percent for 21 to 30 hours and 15.1 percent for 30 or more hours after they transferred to UC.

Comparison of the Number of Hours Worked by Male and Female Transfers

Fifty-six percent of the CSU transfers who worked while attending MSAC were females, and 44 percent were males. Forty-five percent of the UC female transfers were

TABLE 17

HOURS CSU, UC TRANSFERS WORKED PER WEEK WHILE ATTENDING MSAC

	CSU TRANSFERS	%	UC TRANSFERS	%
15 or less hours	48	11.8	13	13.0
16 to 20 hours	119	29.2	33	33.0
21 to 30 hours	120	29.3	33	33.0
over 30 hours	121	29.7	21	21.0
	408	100.0	100	100.0
No Response	66	13.9	14	12.3
	N= 474		N= 114	

TABLE 18

HOURS TRANSFERS WORKED PER WEEK WHILE ATTENDING CSU AND UC

	CSU	%	UC	%
15 or less hours	32	8.4	25	29.1
16 to 20 hours	97	25.4	25	29.1
21 to 30 hours	115	30.2	23	26.7
over 430 hours	137	36.0	13	15.1
	381	100.0	86	100.0
No Response	93	19.6	28	24.6
	N= 474		N= 114	

employed while attending MSAC, and 42 percent of the males were employed.

Sixty percent of the female UC transfers worked between 21 to over 30 hours per week while attending MSAC in contrast to 48 percent of the males. After transferring to UC, these percentages changed to 52 percent of the females working 21 to over 30 hours per week and 32 percent of the males.

These findings that the percentage of females who worked while attending college was higher than the percentage of males contrasts with earlier studies by Cowhig (1963) and MacGregor (1966) that showed more males than females working while going to college and males working significantly more hours. Austin (1975) confirmed the findings of Cowhig and MacGregor and also found that the males had more varied and less tedious job opportunities and that the females were more dependent on their parents to assist them through college (Astin, 1975, pp. 51, 78).

A 1983 study of the National Commission of Student Financial Assistance showed the pattern of student employment was beginning to change. Between 1974 and 1981, the study investigated college student work patterns. The following statistics are from the study.

- In 1981, 40 percent of all full time students reported working. This was a 37 percent increase over 1974.
- The number of hours did not vary significantly among the income categories, but wealthy students tended to work less than middle or lower income students.
- In 1974 more men than women worked, but by 1981 they were equal, but men appeared to work more hours per week than women.
- In 1981, 42 percent of white students worked. This was the highest among the racial groups. Blacks with 28 percent were the lowest. However, black students worked more hours than white students.
- Older students and those more advanced in their academic careers were more likely to be employed.
- Full time community college students were more likely to work than students in four year schools.

College Financial Aid and Other Income Sources for Survey Respondents

CSU Transfers

Table 19 shows that 41.2 percent of the CSU transfers reported a combination of family support and their own income while attending MSAC. The second highest category was their own income reported by 39.5 percent. College scholarships and work study played very minor roles in supporting CSU transfers at MSAC. Only 1.9 percent of the students reported receiving such assistance at MSAC. This increased to 4.6 percent in scholarships after they transferred to CSU. CSU transfers reported receiving a higher percentage (12.2) of financial aid at CSU than the 7.8 percent they received at MSAC. AT CSU, 45.4 percent of the transfers reported their own income as their source of support.

UC Transfers

Table 20 shows that 40.4 percent of the UC transfers reported a combination of family support and their own income while attending MSAC. Over 37 percent (37.7) also reported their own income. Three and one-half percent of the UC transfers reported receiving college scholarships at MSAC, and 10.5 percent of them reported receiving college scholarships at UC. At UC, 36.8 percent of the MSAC transfers reported receiving financial aid in contrast to the 10.5 percent who reported receiving it at MSAC. Forty-three percent reported they had their own

TABLE 19

INCOME SOURCES FOR CSU TRANSFER STUDENTS

No Response MSAC	No Response CSU	(N=474)	At MSAC	%	At CSU	%
276	292	Family sup. Own income	198	41.2	182	38.4
287	259	Own income	187	39.5	215	45.4
402	418	Family sup.	72	15.2	56	11.8
437	416	College fin. aid	37	7.8	58	12.2
465	452	College scholarship	9	1.9	22	4.6
465	465	College work study	9	1.9	9	1.9

Total percent response is over 100 percent because transfers were asked to check as many categories as applied.

TABLE 20

INCOME SOURCES FOR UC TRANSFER STUDENTS

N=114	At MSAC	%	At UC	%	No Response MSAC	No Response UC
Family support/ own income	46	40.4	49	43.0	68	65
College Financial aid	12	10.5	42	36.8	102	72
Own income	43	37.7	36	31.6	71	78
Family support	23	20.2	21	18.4	91	93
College work study	9	7.9	18	15.8	105	96
College schol.	4	3.5	12	10.5	110	102

Total percent response is over 100 percent because transfers were asked to check as many categories as applied.

income in addition to family support after they transferred to UC. More UC transfers (20.2 percent) at MSAC and 18.4 percent at UC reported family support only as their major income source.

CSU and UC Respondents' Parents' Education Levels

Table 21 compares the CSU and UC male and female respondents' fathers' education level. Over 55 percent (55.9) of the CSU female respondents' fathers had attended or graduated from college compared to 58.8 percent of the male respondents' fathers. The UC transfer response in this category was 63.8 percent for the females' fathers and 64.2 percent for the males' fathers. More female CSU and UC respondents reported their fathers' education level as elementary or less.

Table 22 compares the CSU and UC male and female respondents' mothers' education level. More of the female CSU respondents' mothers had graduated or attended college, 46.6 percent, versus 41.9 percent for the males. More male UC respondents' mothers' highest education level was high school graduate, 36.5 percent for the males and 23.7 percent for the females. There were more CSU female respondents than males who reported their mothers' highest education level as elementary or less. This was reversed for the UC respondents, 11.5 percent of the males and 8.5 percent of the females reporting their mothers' education level as elementary or less.

Crosstabulations of CSU and UC Survey Respondents' Parents' Education Level by Home Language

Tables 23 and 24 are crosstabulations of CSU respondents' fathers and mothers' educational level by home language. They show more of the fathers and mothers who

TABLE 21

CSU AND UC TRANSFERS' FATHERS' EDUCATION LEVEL BY RESPONDENTS' GENDER

	CSU				UC			
	Female N=263	%	Male N=199	%	Female N=58	%	Male N=53	%
Elem. or less	28	10.7	14	7.0	5	8.6	4	7.6
Some Hi. School	21	8.0	24	12.1	7	12.1	3	5.6
High School Graduate	65	24.7	44	22.1	9	15.5	12	22.6
Some College	59	22.4	51	25.6	13	22.4	11	20.8
College Grad.	88	33.5	66	33.2	24	41.4	23	43.4
Unknown	2	.7	___	____	__	____	___	____
	263	100.0	199	100.0	58	100.0	53	100.

TABLE 22

CSU AND UC TRANSFERS' MOTHERS' EDUCATION LEVEL BY RESPONDENTS' GENDER

	CSU				UC			
	Female N=263	%	Male N=199	%	Female N=58	%	Male N=53	%
Elem. or less	32	12.3	20	10.1	5	8.5	6	11.5
Some Hi. School	20	7.6	32	11.1	6	10.2	2	3.9
High School Graduate	87	33.5	72	36.4	14	23.7	19	36.5
Some College	66	25.4	44	22.2	15	25.4	14	26.9
College Grad.	55	21.2	39	19.7	19	32.2	11	21.2
Unknown	___	____	1	.5	__	____	___	____
	260	100.0	198	100.0	59	100.0	52	100.0

Number of missing observations: 16

TABLE 23

CROSSTABULATION OF CSU TRANSFERS' FATHERS' HIGHEST EDUCATION LEVEL BY HOME LANGUAGE

	Elem. or Less	Some High Sch.	High Sch. Grad	Some Coll.	Coll. Grad.	Unknown	Row Total
English	17	24	70	77	107	1	296 68.7
Non-English	24	21	32	25	32	1	135 31.5
Column Total	41 9.5	45 10.4	102 23.7	102 23.7	139 32.3	2 .5	431 100.0

Missing observations = 43.

TABLE 24

CROSSTABULATION OF CSU TRANSFERS' MOTHERS' HIGHEST EDUCATION LEVEL BY HOME LANGUAGE

	Elem. or Less	Some High Sch.	High Sch. Grad	Some Coll.	Coll. Grad.	Unknown	Row Total
English	14	23	113	80	65		295 68.8
Non-English	37	19	36	18	23	1	134 31.2
Column Total	51 11.9	42 9.8	149 34.7	98 22.8	88 20.5	1 .2	429 100.0

Missing observations = 45.

were college graduates came from homes where English was the home language. The responses in the categories elementary or less showed English Home Language at 5.7 percent versus non-English at 17.8 percent for the fathers and English Home Language at 4.8 percent versus non-English at 27.6 percent for the mothers.

Tables 25 and 26 show the same crosstabulations for the UC respondents. In this case there were only 1.9 percent difference for fathers who were college graduates between the English and the non-English home language, and a 4.6 percent difference for the mothers. There was a much greater difference between these in the category elementary or less. For the fathers it was 3.7 percent for English versus 13 percent for the non-English. In the

TABLE 25

CROSSTABULATION OF UC TRANSFERS' FATHERS' HIGHEST EDUCATION LEVEL BY HOME LANGUAGE

	Elem. or Less	Some High Sch.	High Sch. Grad	Some Coll.	Coll. Grad.	Row Total
English	2	5	8	16	23	54 50.0
Non-English	7	5	13	7	22	54 50.0
Column Total	9 8.3	10 9.3	21 19.4	23 21.3	45 41.7	108 100.0

Missing observations = 6.

TABLE 26

CROSSTABULATION OF UC TRANSFERS' MOTHERS' HIGHEST EDUCATION LEVEL BY HOME LANGUAGE

	Elem. or Less	Some High Sch.	High Sch. Grad	Some Coll.	Coll. Grad.	Row Total
English	1	3	16	18	15	53 49.1
Non-English	10	5	17	10	13	55 50.9
Column Total	11 10.2	8 7.4	33 30.6	28 25.9	28 25.9	108 100.0

Missing observations = 6.

mothers it was 1.9 percent for the English and 18.2 percent for the non-English home language.

Tables 27 and 28 are crosstabulations of CSU survey respondents' fathers and mothers' educational level by ethnicity. Those of Asian ethnicity had the highest number of college graduates for both father and mother. Forty-three percent of the Asian fathers and 27.1 percent of the Asian for mothers were college graduates.

Tables 29 and 30 are crosstabulations of the UC respondents' fathers' and mothers' educational level by

TABLE 27

CROSSTABULATION CSU SURVEY RESPONDENTS' FATHERS' EDUCATION BY ETHNICITY

	Elem. or Less	Some High Sch.	High Sch. Grad	Some Coll.	Coll. Grad.	Unknown	Row Total
Asian	3	3	13	2	16		37 8.0
Black	4	4	3	4	3		18 3.9
Hispanic	12	9	9	11	9	1	51 11.0
White	18	19	70	76	105	1	289 62.6
Other	5	10	14	17	21		67 14.5
Column Total	42 9.1	45 9.7	109 23.6	110 23.8	154 33.3	2 .4	462 100.0

Number of missing observations: 12.

ethnicity. The white fathers had the highest percentage of college graduates, and those of Asian ethnicity had the highest percentage for the mothers.

TABLE 28

CROSSTABULATION CSU SURVEY RESPONDENTS' MOTHERS' EDUCATION BY ETHNICITY

	Elem. or Less	Some High Sch.	High Sch. Grad	Some Coll.	Coll. Grad.	Unknown	Row Total
Asian	5	5	12	4	10	1	37 8.1
Black	3	3	6	4	2		18 3.9
Hispanic	22	8	13	4	5		52 11.4
White	14	17	107	81	65		284 62.0
Other	8	9	21	17	12		67 14.6
Column Total	52 11.4	42 9.2	159 34.7	110 24.0	94 20.5	1 .2	458 100.0

Number of missing observations: 16.

TABLE 29

CROSSTABULATION UC SURVEY RESPONDENTS' FATHERS' EDUCATION BY ETHNICITY

	Elem. or Less	Some High Sch.	High Sch. Grad	Some Coll.	Coll. Grad.	Row Total
Asian	0	3	1	2	4	12 10.8
Black	0	0	1	1	1	3 2.7
Hispanic	6	1	7	4	11	29 26.1
White	2	6	7	16	38	59 53.2
Other	1	0	3	1	3	8 7.2
Column Total	9 8.1	10 9.0	21 18.9	24 21.6	47 42.3	111 100.0

Number of missing observations: 3.

TABLE 30

CROSSTABULATION UC SURVEY RESPONDENTS' MOTHERS' EDUCATION BY ETHNICITY

	Elem. or Less	Some High Sch.	High Sch. Grad	Some Coll.	Coll. Grad.	Row Total
Asian	2	1	4	1	5	13 11.7
Black	0	0	0	0	2	2 1.8
Hispanic	5	4	9	6	5	29 26.1
White	2	2	18	21	16	59 53.2
Other	2	1	2	1	2	8 7.2
Column Total	11 9.9	8 7.2	33 29.7	29 26.1	30 27.0	111 100.0

Number of missing observations: 3.

The majority of the CSU and the UC respondents came from families where neither parent had attended college. Over 55 percent (55.5) of the CSU respondents' mothers had not attended college, and 36.2 percent of the UC responders' mothers had not attended. Yet next to their own self motivation, both the CSU and the UC respondents identified their mothers as the second most important reason for their academic success at Mt. San Antonio College and the fifth most important reason after their transfer to the university.

Recent research on the role of family emotional support and/or educational tradition supports these findings. In 1987, Delzangle showed the establishment of a family educational tradition was an important reason for students maintaining their academic goals. In her four year comparative study of high school dropouts and graduates in a middle class suburban school district she found that, "58.9 percent of the dropouts came from a family from which one or more members had dropped out, compared to 15.5 percent of the graduates who reported that members of their families had dropped out" (Delzangle, p. 98).

Tinto's (1975) research on dropouts suggests, "even when institutional bias is taken into account, men are more likely than women to perceive educational attainment as directly related to their occupational goals and that their persistence is a matter of economic necessity" (p. 90). Tinto also stated persons from higher social economic levels probably feel a greater need to complete college. Cross (1968) found women from lower economic status families were more inclined not to enter college or were more vulnerable to withdrawal. According to Cross, "Often in low income families it is the male who is more apt to enter college even though his sister may have had a better high school scholastic record (Cross, 1968, p. 70).

CSU and UC Survey Respondents' Home Language

Survey respondents were asked to list the language or languages spoken in their home when they were children.

The data in Appendix H shows over 60 percent (62.8) of the CSU transfers listed English as their home language compared to 45.6 percent of the UC transfers. More UC transfers (30.7 percent) listed their homes were bilingual compared to 18.9 percent of the CSU transfers. More UC transfers (14.9 percent) came from non-English speaking homes compared to 7.8 percent of the CSU transfers. Spanish only was the home language of 4.4 percent of the CSU respondents and 7 percent of the UC respondents.

Survey Respondents' Early Home and School Literacy Environment

Studies by Briggs and Elkind (1977), Krashen (1982, 1984, 1985), Manning and Manning (1984), Morrow (1983), and Thorndike (1973) show a positive correlation between success in reading and early access to books and libraries. These studies suggest a link between a rich early literacy environment and future academic success. It was important to learn from the CSU and UC transfers what their early literacy environment was and if they attended bilingual classes in elementary, junior, or senior high school.

Bilingual Classes Attended by CSU and UC Survey Respondents

Only a small percent of the survey respondents attended bilingual classes in elementary or junior high school. The majority who reported attending bilingual classes did so in high school. Table 31 is a crosstabulation of the CSU respondents' reported attendance in high school

bilingual classes by their home language. The table shows 24.5 percent of the CSU respondents reported being enrolled in high school bilingual classes. Of these, 61.1 percent listed English as their home language, and 24.1 percent came from bilingual homes.

TABLE 31

CROSSTABULATION OF CSU RESPONDENTS' ATTENDANCE IN HIGH SCHOOL BILINGUAL CLASSES BY THEIR HOME LANGUAGE

Home Lang.	Attend. Biling. Classes	%	Did Not Attend	%	Row Total	%
English	66	61.1	227	71.4	293	68.8
Spanish	3	2.8	17	5.3	20	4.7
Bilingual	26	24.1	62	19.5	88	20.6
Non-English	13	12.0	12	3.8	25	5.9
Column Total	108	100.0	318	100.0	426	100.0
No Response	48	10.1 percent				

Table 32 shows the same crosstabulation of the UC respondents. The table shows 26.7 percent of the UC respondents reported being enrolled in high school bilingual classes. Of these, 46.4 percent listed their home language as English, and 28.6 percent were bilingual.

The high percent of respondents who reported coming from English-speaking homes who also reported attending bilingual classes in high school was a surprising finding. The assumption was that more of the students from non-English speaking homes would have been in bilingual classes, since 52.6 percent of the UC respondents and 31.2

percent of the CSU respondents came from non-English speaking and bilingual homes. The responses showed the majority of these students did not attend bilingual classes in elementary, junior, or senior high school.

TABLE 32

CROSSTABULATION OF UC RESPONDENTS' ATTENDANCE IN HIGH SCHOOL BILINGUAL CLASSES BY THEIR HOME LANGUAGE

Home Lang.	Attend. Biling. Classes	%	Did Not Attend	%	Row Total	%
English	13	46.4	39	50.6	52	49.5
Spanish	0	0	6	7.8	6	5.7
Bilingual	8	28.6	23	29.9	31	29.5
Non-English	7	25.0	9	11.7	16	15.3
Column Total	28	100.0	77	100.0	105	100.0
No Response	9					

Buriel and Cardoza (1988), in their study of first, second, and third generation Mexican American high school seniors, postulated that a student's Spanish language background would have neither a positive nor a negative effect on the student's achievement. "Instead, the important linguistic factor that accounts for Mexican Americans' achievement may be English proficiency" (Buriel & Cardoza, 1988, p. 190). They found students' Spanish language background showed no relation to the achievement of the first and second generation high school seniors they studied and "the linguistic variables showed a mixed effect for third-generation students... arguing against

the position that Spanish impedes the academic achievement of Hispanic students" (p. 177).

Early Reading Related to College Success

In 1977 Ryan did a comparative study of college freshmen enrolled in a regular writing class and freshmen enrolled in a remedial writing class. Through home interviews he found a greater number and variety of books in the homes of the freshmen in the regular writing class. He also found better college writers were read to more by their parents as children.

Briggs and Elkind (1977) found five year old children who learned to read early had been taken more often to the library by their parents when they were children. Manning and Manning (1984) found more parents of early readers in kindergarten checked out library books for their children (eight to ten compared to one to ten from the comparison group). Thorndike (1973), in a study of 100,000 students from fifteen countries found correlations between reading comprehension and reading resources.

CSU and UC Survey Respondents' Early Home and School Literacy Environment

Tables 33 through 46 compare the CSU and the UC transfer responses to questions on their early home and school literacy environment. Table 33 shows books were important and very important to 82.6 percent of the CSU respondents and 76.8 percent of the UC respondents.

TABLE 33

TO WHAT DEGREE BOOKS WERE IMPORTANT TO CSU, UC TRANSFERS WHILE GROWING UP

	CSU (N=474)	%	UC (N=114)	%
Unimportant	8	1.7	1	.9
Not important	73	15.7	25	22.3
Important	160	34.5	31	27.7
Very important	233 474	48.1 100.0	55 112	49.1 100.0
No Response			2	1.8

Table 34 and Table 35 show the t test scores for male and female responses to the same question, "to what degree do you believe books were important to you when you were growing up?"

TABLE 34

MEAN SCORES FOR VARIABLE WERE BOOKS IMPORTANT WHILE GROWING UP FOR MALE AND FEMALE CSU RESPONDENTS

Item	Mean Male	Mean Female	t	df	2-tail prob.
Books were important	3.10 (199) S.D. .85	3.43 (265) S.D. .72	-4.54	462	.000

TABLE 35

MEAN SCORES FOR VARIABLE WERE BOOKS IMPORTANT WHILE GROWING UP FOR MALE AND FEMALE UC RESPONDENTS

Item	Mean Male	Mean Female	t	df	2-tail prob.
Books were important	3.02 (53) S.D. .87	3.46 (59) S.D. .75	-2.87	110	.005

These data show that, although both CSU and UC respondents felt books were very important to them while they were growing up, they were more important to the females.

Table 36 is a crosstabulation by home language of the CSU and the UC transfers' responses to the question, "to what degree do you believe books were important to you when you were growing up?"

Table 36 shows 84.5 of the CSU respondents and 75.9 percent of the UC respondents whose home language was English reported books were important and very important to them while they were growing up. The UC respondents from non-English speaking homes reported a higher percent (78.2), and the CSU respondents from non-English speaking homes reported a lower percent (77.7).

Table 37 shows how often CSU and UC transfers reported being read to when they were children. Over 88 percent (88.9) of the CSU and 87.4 percent of the UC responders reported being read to occasionally or often.

TABLE 36

CROSSTABULATION BY HOME LANGUAGE OF CSU, UC TRANSFERS' RESPONSES ABOUT IMPORTANCE OF BOOKS WHILE GROWING UP

	CSU (N=474)	%	UC (N=114)	%
Home Language English				
Very important	151	52.1	31	57.4
Important	94	32.4	10	18.5
Not too important	44	15.2	13	24.1
Unimportant	1	.3	0	0
	290	100.0	54	100.0
Home Language Other than English				
Very important	59	41.3	22	40.0
Important	52	36.4	21	38.2
Not too important	25	17.5	11	20.0
Unimportant	7	4.8	1	1.8
	143	100.0	55	100.0
No Response	41		5	

TABLE 37

HOW OFTEN CSU, UC TRANSFERS WERE READ TO AS CHILDREN

	CSU	%	UC	%
Often	191	41.3	50	45.1
Occasionally	220	47.6	47	42.3
Never	51	11.1	14	12.6
	462	100.0	111	100.0
No Response	12	2.5	3	2.6
N =	474		114	

Table 38 shows a higher percent of respondents from English speaking homes, 93.3 percent of the CSU and 94.4 percent of the UC, reported being read to occasionally or often when they were children. The CSU respondents from non-English speaking homes reported 88.8 percent, and the UC respondents reported 79.6 percent.

Table 38 is a crosstabulation of CSU and UC transfer responses by home language to the question, "how often did someone read to you when you were a child?"

TABLE 38

CROSSTABULATION OF CSU, UC TRANSFER RESPONSES ABOUT HOW OFTEN THEY WERE READ TO AS CHILDREN

	CSU (N=474)	%	UC (N=114)	%
Home Language English				
Often	142	48.0	31	57.4
Occasionally	134	45.3	20	37.0
Never	20	6.7	3	5.6
Total	296	100.0	54	100.0
Home Language Other than English				
Often	36	26.7	17	31.5
Occasionally	73	54.1	26	48.1
Never	26	19.2	11	20.4
Total	135	100.0	54	100.0
No Response	43	9.1	6	5.3

Table 39 compares the responses of CSU and UC transfers asked to list "the following people read to me when I was a child." The respondents were asked to check as many as applied. The person reported most often by both CSU (75.9 percent) and by UC (69.3 percent) was mother or

stepmother. Teacher was second (45.6 percent) for CSU and UC respondents. Father or stepfather was third, with 45.1 percent for CSU respondents and 43.9 percent for UC responders. The fact that a majority of both sets of respondents did not report their teachers read to them was a surprising finding from these data.

TABLE 39

PERSONS WHO READ TO CSU, UC TRANSFERS WHEN THEY WERE CHILDREN

	CSU (N=474)	%	UC (N=114)	%
Mother/stepmother	360	75.9	79	69.3
Teacher	216	45.6	52	45.6
Father/stepfather	214	45.1	50	43.9
Grandmother	119	25.1	24	21.1
Sister	97	20.5	19	16.7
Other Relative	56	11.8	15	13.2
Brother	49	10.3	14	12.3
Other Person	46	9.7	12	10.5
Grandfather	41	8.6	8	7.0

Total percent response is over 100 percent because transfers were asked to check as many categories as applied.

Table 40 compares the CSU and UC transfer responses to the question, "did your parents receive a daily newspaper?" More CSU respondents (84.7 percent) reported their parents did receive a daily newspaper. Table 41 is a crosstabulation of this question by home language. Over 92 percent (92.6) of the UC respondents from English-speaking homes, and 89.2 percent of the CSU respondents' parents received a newspaper. The response was significantly different for the transfers from non-English speaking homes. Over 34 percent (34.5) of the UC respon-

dents and 27.2 percent of the CSU respondents reported their parents did not receive a daily newspaper.

TABLE 40

CSU AND UC TRANSFERS' PARENTS WHO RECEIVED A DAILY NEWSPAPER

	CSU (N=474)	%	UC (N=114)	%
Received a daily newspaper	389	84.7	88	79.3
Did not receive a daily newspaper	70	15.3	23	20.7
No Response	15	3.2	3	2.6
N =	474		114	

TABLE 41

CROSSTABULATION BY HOME LANGUAGE OF CSU, UC TRANSFERS' RESPONSES TO QUESTION, "DID YOUR PARENTS RECEIVE A DAILY NEWSPAPER?"

	CSU (N=474)	%	UC (N=114)	%
Home Language English				
Yes	263	89.2	50	92.6
No	32	10.8	4	7.4
	295	100.0	54	100.0
Home Language Other than English				
Yes	99	72.8	36	65.5
No	37	27.2	19	34.5
	136	100.0	55	100.0
No Response	43	9.1	5	9.0

Totals vary in these comparisons due to differences in response rate for home language.

Table 42 shows the CSU and UC transfers' response to the question, "before you attended school, do you remember watching television?" Over 88 percent (88.2) of the UC transfers and 83.8 percent of the CSU transfers reported watching television before they started school. Table 43 is a crosstabulation of the responses to this question by home language. This table shows a slightly higher percent (.8) of the CSU respondents whose home language was not English watched television before going to school, and 7 percent less of the UC respondents watched television before going to school.

TABLE 42

CSU, UC TRANSFERS WHO WATCHED TELEVISION BEFORE ATTENDING SCHOOL

	CSU (N=474)	%	UC (N=114)	%
Daily	202	43.5	53	47.7
Occasionally	187	40.3	45	40.5
Never	75	16.2	13	11.7
No Response	10	2.1	3	2.6
N =	474		114	

Table 44 shows over 93 percent (93.7) of the CSU transfers and 88.3 percent of the UC transfers reported visiting a library occasionally or often when they were children. More of the UC transfers (11.6 percent) than the CSU transfers (6.3 percent) reported never visiting a library when they were children.

TABLE 43

CROSSTABULATION BY HOME LANGUAGE OF CSU, UC TRANSFERS' RESPONSES TO QUESTION "BEFORE YOU ATTENDED SCHOOL, DO YOU REMEMBER WATCHING TELEVISION?"

	CSU (N=474)	%	UC (N=114)	%
Home Language English				
Daily	129	43.6	29	54.8
Occasionally	117	39.5	20	37.7
Never	50	16.9	4	7.5
Total	296	100.0	53	100.0
Home Language Other than English				
Daily	61	44.5	23	41.9
Occasionally	54	39.4	24	43.6
Never	22	16.1	8	14.5
Total	137	100.0	55	100.0
No Response	41	8.7	6	10.9

Table 45 shows 95.9 percent of the CSU and 92.6 percent of the UC transfers whose home language was English reported visiting a library occasionally or often when they were children, in contrast to 89 percent of the CSU and 81.8 percent of the UC respondents whose home language was not English. Over 18 percent (18.2) of the UC respondents and 11 percent of the CSU respondents in this category reported they never visited a library when they were children.

TABLE 44

CSU, UC TRANSFERS' LIBRARY VISITS AS CHILDREN

	CSU (N=474)	%	UC (N=114)	%
Often	181	39.1	40	36.0
Occasionally	253	54.6	58	52.3
Never	29	6.3	13	11.7
	463	100.0	111	100.0
No Response	11	2.3	2	1.8

TABLE 45

CROSSTABULATION BY HOME LANGUAGE OF CSU, UC TRANSFERS' RESPONSES TO HOW OFTEN THEY VISITED A LIBRARY AS A CHILD

	CSU (N=474)	%	UC (N=114)	%
Home Language English				
Often	127	42.9	24	44.4
Occasionally	157	53.0	26	48.2
Never	12	4.1	4	7.4
Total	296	100.0	54	100.0
Home Language Other than English				
Often	44	32.4	15	27.3
Occasionally	77	56.6	30	54.5
Never	15	11.0	10	18.2
Total	136	100.0	55	100.0
No Response	42	8.9	5	4.4

Table 46 shows the responses of CSU and UC transfers to the question, "did the schools you attended have libraries?" Almost 100 percent (96.9) of the CSU and 96.3 percent of the UC respondents reported libraries in the high schools they attended. Smaller majorities in both cases reported libraries in the junior high schools they

TABLE 46

LIBRARIES IN SCHOOLS ATTENDED BY
CSU, UC TRANSFERS

	CSU (N=474)						UC (N=114)					
	Yes	%	No	%	No Resp.	%	Yes	%	No	%	No Resp.	%
Elementary	327	72.8	122	27.2	25	5.3	81	75.7	26	24.3	7	6.0
Junior High	382	86.2	61	13.8	31	6.5	93	88.6	12	11.4	9	8.0
High School	445	96.9	14	3.1	15	3.2	103	96.3	5	3.7	5	4.0

attended. Over 75 percent (75.7) of the UC transfers and 72.8 percent of the CSU transfers reported libraries in their elementary schools.

According to Krashen (1985),

> For many children who do not come from homes with reading resources the only place books for pleasure are available is the school library. (In one study fourth through sixth grade readers reported from 68 percent to 79 percent of the books they read on their own came from the school library [Famme, 1976] (Krashen, 1985, p. 112).

CHAPTER V

RESPONSES, FINDINGS, AND DISCUSSION

Chapter V presents the responses from the CSU and UC transfers to questions about college faculty, instructional, library, and remedial programs, student services, campus activities, self motivation, personal relationships, and religious affiliation. The discussion presents the transfers' selection of the persons, instructional, and student service programs that they felt helped them to be academically successful at Mt. San Antonio College and at the universities after they transferred. Throughout the chapter, the responses of the CSU and UC transfers are compared and discussed. The significant results of the t tests comparing the responses of male and female transfers, those whose home language was English and not English, those who were white and non-white, are presented and discussed.

The Importance of Parents, Siblings, Spouse, and Friends in Helping CSU and UC Transfers Reach Their Academic Goals

Table 47 shows how the CSU respondents ranked parents, siblings, spouse, and friends in helping them reach their academic goals at MSAC and CSU. The transfers ranked mother/stepmother number one at both MSAC and CSU

followed by father/stepfather, friend, spouse, brother/-sister, and other relative.

Table 48 shows the same comparison for the UC respondents. Again, mothers were rated highest in helping these transfers achieve their academic goals at both MSAC and UC. Fathers ranked second, followed by friend, brother or sister, other relative, and spouse.

Polland, in her 1983 study of special and regularly admitted students at California State University, Northridge, found 79 percent of the specially admitted students and 48 percent of the regularly admitted students selected "family" as a main reason for their academic success.

In their study of Hispanic student aspirations, Buriel and Cardoza (1988) found the students' aspirations and their mother's aspirations for them were uniformly high for the first, second, and third generation Hispanic students they studied. According to Buriel and Cardoza, "Personal aspirations are by far the most potent predictors of achievement for all three generations of Mexican American students" (p. 186). According to Booth (1987),

> The importance of family emotional as well as economic support on academic persistence is well documented; even when academic ability and socio-economic status are discounted, many average academically equipped students will succeed in college while others more talented or better off financially will discontinue (1987, p. 75).

Tables 47 and 48 illustrate among significant others mothers were rated number one in helping UC and CSU transfers achieve their academic goals both at MSAC and

TABLE 47

IMPORTANCE OF PARENTS, SIBLINGS, SPOUSE, AND FRIENDS IN HELPING UC TRANSFERS REACH ACADEMIC GOALS (N=474)

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
MSAC Mother/ stepmother	52	47.7	30	27.5	8	7.3	19	17.4	109
UC Mother/ stepmother	56	54.4	23	22.3	9	8.7	15	14.6	103
MSAC Father/ stepfather	43	39.8	29	26.9	14	13.0	22	20.4	108
UC Father/ stepfather	49	48.0	21	20.6	14	13.7	18	17.6	102
MSAC Friend	32	29.1	25	22.7	13	11.8	40	36.4	110
UC Friend	37	32.5	24	21.1	10	8.8	34	29.8	105
MSAC Brother/Sis	24	26.8	20	18.2	26	23.6	40	36.4	110
UC Brother/Sis	25	24.0	18	17.3	24	23.1	37	35.6	104
MSAC Other Rel.	15	14.2	13	12.3	15	14.2	63	59.4	106
UC Other Rel.	13	12.9	16	15.8	11	10.9	61	60.4	101
MSAC Spouse	11	12.6	2	2.3	2	2.3	72	82.8	87
UC Spouse	12	14.5	4	4.8	1	1.2	66	79.5	83

TABLE 48

IMPORTANCE OF PARENTS, SIBLINGS, SPOUSE, AND FRIENDS IN HELPING CSU TRANSFERS REACH ACADEMIC GOALS (N=114)

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
MSAC Mother/ stepmother	179	39.1	130	28.4	61	13.3	88	19.2	45
CSU Mother/ stepmother	158	38.0	112	26.9	54	13.0	92	22.1	41
MSAC Father/ stepfather	155	33.8	126	27.5	71	15.5	106	23.1	45
CSU Father/ stepfather	145	34.8	100	24	60	14.4	112	26.7	41
MSAC Friend	76	17.0	136	30.4	75	16.8	160	35.8	44
CSU Friend	79	19.3	122	29.8	66	16.1	143	34.9	41
MSAC Spouse	75	19.1	33	8.4	21	5.3	264	67.2	39
CSU Spouse	94	25.4	34	9.2	17	4.6	225	60.8	37
MSAC Brother/Sis	67	15.0	82	18.3	110	24.6	189	42.2	44
CSU Brother/Sis	66	16.0	75	18.2	84	20.6	187	45.4	41
MSAC Other Rel.	40	9.3	61	14.1	57	13.2	274	63.4	43
CSU Other Rel.	33	8.3	53	13.3	51	12.8	261	65.6	39

after they transferred to a university. UC transfers rated mother 75.2 percent very important, important at MSAC and 76.7 percent at UC. CSU transfers rated mother 67.5 percent at MSAC and 64.9 at CSU.

The t test results comparing the responses for these variables for males and females, home language, English and non-English, and White and non-White showed no significance for the variables mother, stepmother, father/stepfather but did show significance for the following variables: spouse, sibling, and other relative. Tables 49 and 50 show the mean scores for these selected variables.

Although neither group rated other relatives very highly in assisting them to reach their academic goals at MSAC, they were more significant to the males. Husbands were more significant to the females both at MSAC and CSU.

Siblings were more significant at MSAC for both CSU and UC non-White transfers. Other relatives were significant at MSAC for non-White UC transfers and they approached significance at .065 for these transfers at the university.

Table 51 shows brothers and sisters were more significant at MSAC and CSU to responders whose home language was not English.

TABLE 49

MEAN SCORES FOR OTHER RELATIVE AND SPOUSE VARIABLES FOR MALE AND FEMALE CSU TRANSFERS

Item	Mean Male	Mean Female	t	df	2-tail Prob.
Other relative at MSAC	1.82 (191) S.D. 1.08	1.59 (241) S.D. 0.98	2.26	430	.024
Spouse at MSAC	1.55 (174) 1.06	1.99 (219) 1.30	-3.66	391	.000
Spouse at CSU	1.68 (165) 1.16	2.24 (205) 1.37	-4.21	368	.000

TABLE 50

MEAN SCORES FOR SIBLING AND SPOUSE VARIABLES FOR WHITE AND NON-WHITE CSU AND UC TRANSFERS

Item	Mean White	Mean Non-White	t	df	2-tail Prob.
		CSU Transfers			
Sibling at MSAC	1.96 (255) S.D. 1.09	2.18 (157) S.D. 1.18	-1.93	410	.055
		UC Transfers			
Sibling at MSAC	2.02 (58) 1.13	2.52 (52) 1.16	-2.29	108	.024
Other Relative at MSAC	1.59 (59) 0.99	2.09 (47) 1.23	-2.29	104	.024

TABLE 51

MEAN SCORES FOR SIBLING VARIABLES FOR HOME LANGUAGE, ENGLISH AND NON-ENGLISH CSU TRANSFERS

Item	Mean English	Mean Non-Eng.	t	df	2-tail Prob.
Sibling at MSAC	2.01 (288) S.D. 1.07	2.24 (127) S.D. 1.14	-2.01	413	.046
Sibling at CSU	1.97 (267) S.D. 1.11	2.26 (115) S.D. 1.17	-2.28	380	.023

Both CSU and UC transfers rated their self motivation number one and their religious affiliation last. UC respondents gave the second highest rating to friends they met at MSAC and UC. CSU respondents rated friends who had the same major second and friends they studied with third.

The t test results comparing the responses for these variables for males and females, home language English and non-English, and White and non-White showed no significance except for self motivation, friends with the same major, studying with friends, and religious affiliation. Tables 54 and 55 show the mean scores for these selected variables.

The Importance of Self Motivation, Personal Relationships, and Religious Affiliation in Helping CSU and UC Transfers Reach Their Academic Goals

Tables 52 and 53 show the degree of importance CSU and UC responders gave to relationships and religious

TABLE 52

THE IMPORTANCE OF SELF MOTIVATION, PERSONAL RELATIONSHIPS, AND RELIGIOUS AFFILIATION IN HELPING CSU TRANSFERS REACH THEIR ACADEMIC GOALS

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
My Self Motivation									
MSAC	314	67.8	109	23.5	31	6.7	9	1.9	463
CSU	333	74.7	94	21.1	10	2.2	9	2.0	446
Friends Who Had the Same Major									
MSAC	128	28.0	123	26.9	99	21.7	107	23.4	457
CSU	195	44.1	153	34.6	52	11.8	42	9.5	442
Friends I Studied With									
MSAC	125	27.4	135	29.5	100	21.9	97	21.2	457
CSU	159	35.7	155	34.8	64	14.3	68	15.2	446
Friends I Met									
MSAC	121	26.3	187	40.7	99	21.5	53	11.5	460
CSU	139	31.2	199	44.6	62	13.9	46	10.3	446
People I Admired and Wanted to be Like									
MSAC	105	22.9	134	29.2	99	21.6	121	26.4	459
CSU	127	28.6	141	31.8	67	15.1	109	24.5	444

TABLE 52, cont.

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Friends Off Campus									
MSAC	106	23.1	137	29.9	98	21.4	117	25.7	458
CSU	108	24.4	144	32.5	80	18.1	111	25.1	443
My Religious Affiliation									
MSAC	46	10.0	75	16.3	69	15.0	270	58.7	460
CSU	53	11.9	61	13.7	70	15.7	261	58.7	445

Because of no response in the different categories, the number of valid cases in each category does not add to 474.

TABLE 53

THE IMPORTANCE OF SELF MOTIVATION, PERSONAL RELATIONSHIPS, AND RELIGIOUS AFFILIATION IN HELPING UC TRANSFERS REACH THEIR ACADEMIC GOALS

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
My Self Motivation									
MSAC	71	66.4	23	21.5	9	8.4	4	3.7	107
UC	85	81.0	15	14.3	2	1.9	3	2.9	105
Friends I Met									
MSAC	40	35.1	28	24.6	26	22.8	14	12.3	108
UC	61	58.1	29	27.6	9	8.6	6	5.7	105
Friends I Studied With									
MSAC	40	37.0	21	19.4	23	21.3	24	22.2	108
UC	59	55.7	25	23.6	11	10.4	11	10.4	106
Friends Who Had the Same Major									
MSAC	31	29.2	19	17.9	21	19.8	35	33.0	106
UC	56	53.3	24	22.9	13	12.4	12	11.4	105
Friends Off Campus									
MSAC	38	35.5	29	27.1	16	15.0	24	22.4	107
UC	48	46.6	18	17.5	16	15.5	21	20.4	103

TABLE 53, cont.

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
People I Admired And Wanted to be Like									
MSAC	29	27.6	20	19.0	24	22.9	32	30.5	105
UC	38	36.5	25	24.0	18	17.3	23	22.1	104
My Religious Affiliation									
MSAC	12	11.3	6	5.7	19	17.9	69	65.1	106
UC	12	11.7	7	6.8	19	18.4	65	63.1	103

Because of no response in the different categories, the number of valid cases in each category does not add to 114.

affiliation in helping them reach their academic goals. Table 54 shows although their self motivation was highly significant to both male and female CSU transfers,

TABLE 54

MEAN SCORES FOR SELF MOTIVATION AND PERSONAL RELATIONSHIP VARIABLES FOR CSU TRANSFERS

Item	Mean		t value	df	2-tailed prob.
	Male and Female				
	Male	Female			
Self Motivation at CSU	3.61 (192) s.d. 0.69	3.74 (254) s.d. 0.55	-2.06	444	.040
	White and Non-White				
	White	Non-White			
Friends with the Same Major at CSU	3.21 (276) s.d. 0.91	3.01 (166) s.d. 1.02	2.17	440	.030
	Home Language English and Non-English				
	Eng.	Non-Eng.			
Friend with the Same Major at MSAC	2.52 (290) s.d. 1.00	2.80 (133) s.d. 1.13	-2.43	421	.015
Study with Friend at MSAC	2.56 (290) s.d. 1.11	2.83 (132) s.d. 1.08	-2.28	420	.023

it was more important to the females. Friends with the same major were important to both White and non-White students at CSU, but they were more important to the White students. For CSU transfers whose home language was not

English, studying with friends and friends who had the same major were very important.

Table 55 shows studying with friends at MSAC was more important for the female UC transfers. Studying with friends at UC was very important for both White and non-White students but more significant for non-White students. The religious affiliation of non-White students was more important to them at both MSAC and UC. For students whose home language was not English, studying with friends and their religious affiliation was more important at UC.

The Importance of Counselors, Educational Advisors, and Faculty in Helping CSU and UC Transfers Reach Their Academic Goals

Table 56 shows to what degree high school and college counselors, educational advisors, and faculty were important in helping CSU transfers reach their academic goals at MSAC and CSU after they transferred. Students ranked faculty members at CSU 66.6 percent important-very important as number one followed by faculty members at MSAC, 55.2 percent important-very important and faculty advisor, 51.10 percent important-very important. The other categories ranked below 50 percent in the category important-very important.

Table 57 shows to what degree these same variables were significant to UC transfers at MSAC and UC. In this case, faculty members at MSAC were 61.8 percent important-

TABLE 55

MEAN SCORES FOR PERSONAL RELATIONSHIP AND RELIGIOUS AFFILIATION VARIABLES FOR UC TRANSFERS

Item	Mean		t value	df	2-tailed prob.
	Male and Female				
	Male	Female			
Study with Friends at at MSAC	2.47 (49) s.d. 1.23	2.92 (59) s.d. 1.12	-1.97	106	.051
	White and Non-White				
	White	Non-White			
Religious Affil at UC	1.41 (56) s.d. 0.85	1.98 (47) s.d. 1.15	-2.88	101	.005
Religious Affil at MSAC	1.41 (58) s.d. 0.84	1.90 (48) s.d. 1.15	-2.49	104	.014
Study with Friends at UC	3.04 (58) s.d. 1.08	3.50 (48) s.d. 0.88	-2.41	104	.018
	Home Language English and Non-English				
	Eng.	Non-Eng.			
Study with Friends at MSAC	3.00 (52) s.d. 1.09	3.45 (49) s.d. 0.91	-2.24	99	.027
Religious Affil at UC	1.46 (50) s.d. 0.89	1.94 (48) s.d. 1.16	-2.30	96	.024

very important were rated the highest, followed by faculty member at UC, 60 percent. The other categories ranked

TABLE 56

THE DEGREE HIGH SCHOOL AND COLLEGE COUNSELORS, EDUCATIONAL ADVISORS, AND FACULTY WERE IMPORTANT IN HELPING CSU TRANSFERS REACH THEIR ACADEMIC GOALS

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Faculty Member									
MSAC	104	23.0	146	32.2	121	26.7	82	18.1	453
CSU	128	29.5	161	37.1	90	20.7	55	12.7	434
Counselor/Fac. Advisor									
MSAC Couns.	69	14.8	106	22.8	172	37.0	118	25.4	465
CSU Fac. Ad.	98	21.8	132	29.3	135	30.0	85	18.9	450
High School Instructor									
MSAC	64	14.2	121	26.8	102	22.6	164	36.4	451
CSU	50	12.6	81	20.4	76	19.1	191	48.0	398
Educational Adv.									
MSAC	30	6.8	82	18.6	104	23.5	226	51.1	442
CSU	51	11.8	106	24.6	92	21.3	182	42.2	431
High School Counselor									
MSAC	27	5.9	65	14.3	116	25.4	248	54.4	456
CSU	24	5.9	41	10.1	84	20.8	225	63.1	404

Because of no responses in different categories, the number of valid cases in each category does not add to 474.

TABLE 57

THE DEGREE HIGH SCHOOL AND COLLEGE COUNSELORS, EDUCATIONAL ADVISORS, AND FACULTY WERE IMPORTANT IN HELPING UC TRANSFERS REACH THEIR ACADEMIC GOALS

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Faculty Member									
MSAC	31	28.2	37	33.6	27	24.5	15	13.6	110
UC	26	24.8	37	35.2	26	24.8	16	15.2	105
Counselor/Fac. Advisor									
MSAC Couns.	10	8.8	31	27.4	34	30.1	38	33.6	113
UC Fac. Adv.	16	15.0	33	30.8	43	40.2	15	14.0	107
High School Instructor									
MSAC	19	17.6	22	20.4	24	22.2	43	39.8	108
UC	18	18.9	18	18.9	15	15.8	44	46.3	95
Educational Adv.									
MSAC	9	8.3	29	26.9	26	24.1	44	40.7	108
UC	17	15.9	33	30.8	17	15.9	40	37.4	107
High School Counselor									
MSAC	10	9.2	25	22.9	14	12.8	60	55.0	109
UC	11	11.2	13	13.3	12	12.2	62	63.3	98

Because of no responses in different categories, the number of valid cases in each category does not add to 114.

below 50 percent in the categories important-very important.

The significant results of the t tests comparing high school and college counselors, educational advisors, and faculty variables for CSU male and female, White and non-White, and home language English and non-English are shown in Table 58. The table shows high school instructors were more important to non-White students and students whose home language was not English. Mt. San Antonio College educational advisors approached more significance at .064 for students whose home language was not English. High school counselors and instructors were more significant at MSAC for students whose home language was not English.

The t test results comparing high school and college counselors, educational advisors, and faculty variables for UC transfers showed no significance for males and females. Table 59 shows educational advisors at UC and high school counselors at MSAC and UC were more significant to non-White students. High school counselors at UC approach significance at .065 for non-White students. High school counselors at MSAC were more important for students whose home language was not English.

Table 60 summarizes and compares the percent of important, very important responses from CSU and UC transfers about the significance of self motivation, family and friends, religious affiliation, college and high school counselors, educational advisors, and faculty in helping

TABLE 58

MEAN SCORES FOR HIGH SCHOOL INSTRUCTOR AND COUNSELOR VARIABLES FOR CSU TRANSFERS

Item	Mean		t value	df	2-tailed prob.
	Male and Female				
	Male	Female			
High School Instructor at CSU	2.09 (177) s.d. 1.09	1.88 (221) s.d. 1.08	1.90	396	.058
	White and Non-White				
	White	Non-White			
MSAC Counselor	2.17 (287) s.d. 0.97	2.43 (178) s.d. 1.04	-2.76	463	.006
	Home Language English and Non-English				
	Eng.	Non-Eng.			
MSAC Counselor	2.20 (294) s.d. 0.98	2.43 (134) s.d. 1.02	-2.27	426	.024
High School Counselor at MSAC	1.67 (290) s.d. 0.86	1.87 (129) s.d. 1.06	-2.00	417	.046
High School Instructor at MSAC	2.12 (286) s.d. 1.07	2.38 (128) s.d. 1.06	-2.23	412	.026

TABLE 59

MEAN SCORES FOR HIGH SCHOOL INSTRUCTOR, COUNSELOR, AND EDUCATIONAL ADVISOR VARIABLES FOR UC TRANSFERS

Item	Mean		t value	df	2-tailed prob.
	White and Non-White				
	White	Non-White			
High School Instructor at MSAC	1.88 (58) s.d. 1.08	2.48 (50) s.d. 1.13	-2.83	106	.006
High School Counselor at MSAC	1.63 (59) s.d. 0.93	2.14 (50) s.d. 1.16	-2.56	107	.012
UC Educational Advisor	2.02 (57) s.d. 1.04	2.52 (50) s.d. 1.17	-2.35	105	.020
High School Counselor at UC	1.50 (54) s.d. 0.89	2.00 (54) s.d. 1.22	-2.35	96	.021
	Home Language English and Non-English				
	Eng.	Non-Eng.			
High School Counselor at MSAC	1.68 (53) s.d. 1.00	2.10 (51) s.d. 1.12	-2.02	102	.046

TABLE 60

VARIABLES SIGNIFICANT TO CSU AND UC TRANSFERS' ACADEMIC SUCCESS AT MSAC

Very Important/ Important	CSU N=474	%	UC N=114	%
My self motivation	427	91.3	94	87.9
Mother/stepmother	309	67.5	82	75.2
Friends I met at MSAC	308	67.0	68	59.7
Father/stepfather	281	61.3	72	66.7
Friends off campus	243	53.0	67	62.6
MSAC faculty member	250	55.2	68	61.8
Friends I studied with at MSAC	260	56.9	61	56.4
Friends who had the same major at MSAC	251	54.9	50	47.1
People I admired and wanted to be like	239	52.1	49	46.6
Friend at MSAC	212	47.4	57	51.8
High school instructor	185	41.0	41	38.0
Brother/sister	149	33.3	44	40.0
MSAC counselor	175	37.6	41	36.2
Educational advisor at MSAC	112	25.4	28	35.2
Spouse	108	27.5	13	14.3
My religious affil.	121	26.3	18	17.0
Other relative	101	23.4	28	16.5
High school counselor	65	16.0	35	22.1

them reach their academic goals at Mt. San Antonio College. Self motivation and mother/stepmother were rated first and second by both CSU and UC transfers. CSU transfers next rated friends they met at MSAC, their father/stepfather, and a MSAC faculty member. UC transfers rated next father/stepfather, friends they met at MSAC, a MSAC faculty member, and friends they met off campus.

Table 61 summarizes and compares the percent of important, very important responses from CSU and UC transfers about the significance of self motivation, family and friends, religious affiliation, college and high school counselors, educational advisors, and faculty in helping them reach their academic goals at the California State University and the University of California. Self motivation was rated number one, 96.3 percent, by UC transfers and 95.8 percent by CSU transfers. The next highest five rated by UC transfers were: friends I met at UC (85.7 percent), friends I studied with at UC (79.3 percent), mother/stepmother (76.7 percent), friends who had the same major at UC (76.2 percent), father/stepfather (61.4 percent).

The next highest five rated by the CSU transfers were: friends who had the same major at CSU (78.7 percent), friends I met at CSU (75.8 percent), friends I studied with at CSU (70.5 percent), faculty member (66.6 percent), and mother/stepmother (64.9 percent).

TABLE 61

VARIABLES SIGNIFICANT TO TRANSFERS' ACADEMIC SUCCESS AT CSU, UC

Very Important/ Important	CSU	%	UC	%
My self motivation	428	95.8	100	95.3
Friends I met at CSU, UC	338	75.8	90	85.7
Friends I studied with at CSU, UC	314	70.5	84	79.3
Friends who had same major at CSU, UC	348	78.7	80	76.2
Mother/stepmother	309	64.9	79	76.7
Father/stepfather	245	58.8	70	61.4
Faculty member at CSU, UC	289	66.6	63	60.0
Friends off campus	252	56.9	66	57.9
People I admired and wanted to be like	268	60.4	62	60.5
Friend at CSU, UC	201	49.1	61	53.6
CSU/UC faculty advisor	230	51.1	49	45.0
Educational advisor	157	36.4	50	46.7
Brother or sister	141	34.2	43	41.3
High school instructor	131	33.0	36	37.8
Spouse	128	34.6	16	19.3
Other relative	86	21.6	29	28.7
Religious affil.	114	25.6	19	18.5
High school counselor	65	16.0	24	24.5

The Importance of Faculty and Instructional Programs in Helping CSU and UC Transfers Reach Their Academic Goals

Table 62 shows to what degree CSU transfers felt faculty and instructional variables were significant in helping them reach their academic goals at MSAC and CSU after they transferred. The students rated the same top five variables at MSAC and CSU as being important and very important to their academic success. They were: clear deadlines for class assignments, faculty who were well organized, faculty giving me a syllabus, faculty knowledge of the subject, and faculty who were concerned and responsive to student needs. The next four important, very important at MSAC were: faculty who renewed my confidence and self-esteem, being able to drop a course, faculty providing pertinent job related information, and faculty providing advice and helping me develop my educational goals.

At CSU the next four were faculty providing pertinent job related information, faculty who renewed my confidence and self-esteem, faculty providing advice and helping develop my educational goals, and internship work experience in my major. Though this last variable was important, very important to 32.7 percent at MSAC, at CSU the percent reached 54.4.

Table 63 shows to what degree UC transfers felt faculty and instructional variables were significant in helping them reach their academic goals at MSAC and UC

TABLE 62

THE DEGREE FACULTY AND INSTRUCTIONAL PROGRAMS WERE IMPORTANT IN HELPING CSU TRANSFERS REACH THEIR ACADEMIC GOALS

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Clear deadlines for class assignments									
MSAC	275	58.9	152	32.5	29	6.2	11	2.0	467
CSU	267	59.5	145	32.3	24	5.3	12	2.0	449
Faculty giving me a class syllabus									
MSAC	234	50.2	153	32.8	51	10.9	28	6.0	466
CSU	252	56.4	137	30.6	33	7.4	25	5.0	447
Faculty who were concerned and responsive to student needs									
MSAC	200	43.1	168	36.2	66	14.2	30	6.5	464
CSU	202	45.6	156	35.2	52	11.7	33	7.4	443
Faculty knowledge of the subject									
MSAC	175	37.5	214	45.8	55	11.8	23	4.9	467
CSU	226	47.7	177	37.3	28	5.9	16	3.4	447

TABLE 62, continued

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Faculty who were well organized									
MSAC	176	37.8	216	46.4	56	12.0	18	3.9	466
CSU	199	44.6	193	43.3	30	6.7	24	5.4	446
Faculty who renewed my confidence/self esteem									
MSAC	140	30.5	146	31.8	98	21.4	75	16.0	459
CSU	151	34.3	145	33.0	70	15.9	74	16.0	440
CSU Overseas Study program	20	4.9	33	8.0	40	9.7	318	77.4	411
Faculty providing pertinent job-related info.									
MSAC	110	23.9	121	26.3	126	27.4	103	22.0	460
CSU	175	39.5	128	38.9	70	15.8	70	15.0	443
Being able to drop a class									
MSAC	122	26.7	135	29.5	91	19.9	109	23.0	457
CSU	102	33.1	131	29.7	92	20.9	116	26.0	441
Internship/work experience related to major									
MSAC	86	19.4	59	13.3	57	12.8	242	54.5	444
CSU	150	34.0	90	20.4	44	10.0	157	35.6	441

TABLE 62, continued

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Faculty providing advice/helping with educational goals									
MSAC	93	20.0	128	27.6	131	28.2	112	24.1	464
CSU	124	27.7	152	34.0	98	21.9	73	16.3	447
Faculty providing contacts with career professionals in my field									
MSAC	71	15.6	66	13.9	126	26.6	192	42.0	455
CSU	137	31.1	94	21.4	102	23.2	107	24.0	440
Being able to repeat a class									
MSAC	90	20.0	93	20.7	76	16.9	191	42.0	450
CSU	78	18.1	101	23.4	84	19.4	169	39.1	432
Research opportunity for off campus study									
MSAC	49	11.6	61	14.4	65	15.3	249	58.0	431
CSU	79	18.3	88	20.4	53	12.3	211	49.0	424

Because of no responses in different categories, the number of valid cases in each category does not add to 474.

TABLE 63

THE DEGREE FACULTY AND INSTRUCTIONAL PROGRAMS WERE IMPORTANT IN HELPING UC TRANSFERS REACH THEIR ACADEMIC GOALS

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Clear deadlines for class assign-ments									
MSAC	65	58.6	33	29.7	9	8.1	4	3.6	111
UC	69	64.5	26	24.3	8	7.5	4	3.7	107
Faculty giving me a class syllabus									
MSAC	59	52.7	39	34.8	11	9.8	3	2.7	112
UC	66	60.6	31	28.4	9	8.3	3	2.8	109
Faculty knowledge of the subject									
MSAC	40	35.7	48	42.9	17	15.2	7	6.3	112
UC	58	53.2	38	34.9	9	5.5	7	6.4	109
Faculty who were concerned and responsive to student needs									
MSAC	50	44.6	40	35.7	14	12.5	8	7.1	112
UC	46	41.8	37	33.6	17	15.5	10	9.1	110

TABLE 63, continued

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Faculty who were well organized									
MSAC	41	36.6	51	45.5	14	12.5	6	5.4	112
UC	51	46.4	42	38.2	10	9.1	7	6.4	110
Faculty who renewed my confidence/self-esteem									
MSAC	37	32.5	39	34.2	13	11.4	22	19.8	111
UC	36	34.6	29	27.9	22	21.2	17	16.3	104
Internship/work experience related to major									
MSAC	18	17.3	9	8.7	17	16.3	60	57.7	104
UC	38	36.2	25	23.8	13	12.4	29	27.6	105
Faculty providing advice and helping me develop educational goals									
MSAC	19	17.3	45	40.9	24	21.8	22	20.0	110
UC	26	24.3	36	33.6	23	21.5	22	20.6	107
Faculty providing contacts with career professionals in my field									
MSAC	17	15.3	22	19.8	26	23.4	46	41.4	111
UC	28	25.7	30	27.5	20	18.3	13	28.4	109

TABLE 63, continued

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Faculty providing pertinent job info.									
MSAC	18	16.2	38	34.2	23	20.7	32	28.8	111
UC	26	23.9	33	30.3	28	25.7	22	20.2	109
Being able to drop a class									
MSAC	22	20.0	28	25.5	25	22.7	35	31.8	110
UC	21	19.4	26	24.1	26	24.1	35	32.4	108
Being able to repeat a class									
MSAC	21	19.3	17	15.6	16	14.7	55	50.5	109
UC	17	16.0	21	19.8	18	17.0	50	47.2	106
Research opportunities for off-campus study									
MSAC	8	7.9	15	14.9	19	18.8	59	58.4	101
UC	21	20.8	26	25.7	12	11.9	42	41.6	101
UC overseas study program	9	9.1	7	7.1	11	11.1	72	72.7	99

Because of no responses in different categories, the number of valid cases in each category does not add to 114.

after they transferred. The students rated the same top six variables at MSAC and UC as being important, very important to their academic success. They were: class deadlines for assignments, faculty who gave me a class syllabus, faculty knowledge of the subject, faculty who were concerned and responsive to student needs, faculty who were well organized, and faculty who renewed my confidence and self-esteem. The next four important, very important to MSAC transfers were: faculty providing advice and helping me develop my academic goals, faculty providing contacts with career professionals in my field, faculty providing pertinent job information, and being able to drop a class.

The t test results comparing the faculty and instructional variables for CSU male and female White and non-White, home language English and non-English showed significance in the case of eighteen variables. Tables 64, 65, and 66 illustrate these results.

The t test results comparing these same variables for UC transfer students showed significance in the case of ten variables. Tables 67, 68, and 69 illustrate these results.

Table 64 shows although clear deadlines for class assignments and faculty who renewed confidence and self-esteem were very significant for both males and females, they were more significant for females at both MSAC and CSU. Internship and work experience related to major were

TABLE 64

MEAN SCORES FOR SELECTED FACULTY AND INSTRUCTIONAL PROGRAM VARIABLES FOR MALE AND FEMALE CSU TRANSFERS

Item	Mean		t	df	2-tail Prob.
	Male	Female			
Clear deadlines for class assign. at CSU	3.32 (195) s.d. 0.79	3.61 (254) s.d. 0.65	-4.29	447	.000
Clear deadlines for class assign. at MSAC	3.35 (335) s.d. 0.77	3.58 (266) s.d. 0.66	-3.48	465	.001
Faculty giving me class syllabus CSU	3.22 (195) 0.87	3.50 (252) 0.81	-3.50	445	.001
Faculty giving me class syllabus MSAC	3.14 (201) s.d. 0.87	3.37 (265) s.d. 0.88	-2.86	464	.004
Intnship/ work exp. related major CSU	2.34 (192) s.d. 1.26	2.67 (249) s.d. 1.28	-2.75	439	.006
Faculty renewed conf/self esteem MSAC	2.61 (197) s.d 1.04	2.88 (262) s.d 1.06	-2.75	457	.006
Being able to repeat course CSU	2.32 (191) s.d. 1.13	2.11 (241) s.d. 1.15	1.96	430	.050

TABLE 64, continued

Item	Mean Male	Mean Female	t	df	2-tail Prob.
Faculty renewed conf/self esteem CSU	2.73 (192) s.d. 1.06	2.94 (248) s.d. 1.07	-1.95	438	.051

more significant to females at CSU. Being able to repeat a class at CSU was more significant to the males and approached significance at .064 for males at MSAC.

Table 65 shows being able to repeat a class, faculty providing pertinent job information, and contacts with career professionals in their field were more significant to non-White students.

Table 66 shows at MSAC the following variables were more significant for students whose home language was not English: being able to to repeat a class, faculty providing pertinent job information and contacts with professionals in their field, and research opportunities for off-campus study. At CSU, research opportunities for off-campus study were also more significant to students whose home language was not English. Though the CSU overseas study program was not particularly important to any of the transfers, it was more significant to those transfers whose home language was not English.

TABLE 65

MEAN SCORES FOR SELECTED FACULTY AND INSTRUCTIONAL PROGRAM VARIABLES FOR WHITE AND NON-WHITE CSU TRANSFERS

Item	Mean		t	df	2-tail Prob.
	White	Non-White			
Able to repeat class at MSAC	2.06 (277) s.d. 1.14	2.38 (173) s.d. 1.23	-2.84	448	.005
Faculty providing pertinent job info. at MSAC	2.43 (283) s.d. 1.07	2.66 (177) s.d. 1.10	-2.25	458	.025
Faculty prov. contact w/ professionals in my field MSAC	1.95 (280) s.d. 1.02	2.18 (175) s.d. 1.18	-2.20	454	.028

TABLE 66

MEAN SCORES FOR SELECTED FACULTY AND INSTRUCTIONAL PROGRAM VARIABLES FOR LANGUAGE ENGLISH AND NON-ENGLISH CSU TRANSFERS

Item	Mean English	Mean Non-English	t	df	2-tail Prob.
Able to repeat class at MSAC	2.04 (285) s.d. 1.15	2.52 (130) s.d. 1.21	-3.89	413	.000
CSU overseas stdy program	1.31 (265) s.d. 0.74	1.56 (117) s.d. 0.91		380	.006
Faculty prov. contact w/ professionals in my field CSU	2.51 (284) s.d. 1.16	2.84 (123) s.d. 1.11	-2.64	405	.009
Faculty prov. pertinent job info MSAC	2.42 (291) s.d. 1.09	2.71 (133) s.d. 1.06	-2.54	422	.011
Research oppor. for off-campus study CSU	1.97 (275) s.d. 1.17	2.29 (123) s.d. 1.21	-2.51	396	.012
Research oppor. for off-campus study MSAC	1.70 (269) s.d. 1.00	1.94 (121) s.d. 1.16	-2.10	388	.036
Faculty provide contacts w/profes. field MSAC	1.96 (290) s.d. 1.05	2.19 (129) s.d. 1.15	-2.09	417	.037

Table 67 shows being able to repeat a class at UC and research opportunities for off-campus study were more significant to males, and the UC overseas study program was more significant to females.

Table 68 shows internship or work related to major and being able to repeat a class were more significant to non-White students at both MSAC and UC. Being able to drop a class at UC was also more significant for non-White students.

Table 69 shows at MSAC faculty knowledge of subject was more significant to student whose home language was English. Research opportunities for off-campus study were more significant at MSAC to students whose home language was not English.

TABLE 67

MEAN SCORES FOR SELECTED FACULTY AND INSTRUCTIONAL PROGRAM VARIABLES FOR MALE AND FEMALE UC TRANSFERS

Item	Mean		t	df	2-tail Prob.
	Male	Female			
Being able to repeat class UC	2.36 (50) s.d. 1.23	1.77 (56) s.d. 1.01	2.73	104	.007
Research oppor. for off-campus study UC	2.53 (45) s.d. 1.24	2.04 (56) s.d. 1.14	2.10	99	.039
UC overseas stdy program	1.31 (45) s.d. 0.70	1.70 (54) s.d. 1.13	-2.03	97	.045

TABLE 68

MEAN SCORES FOR SELECTED FACULTY AND INSTRUCTIONAL PROGRAM VARIABLES FOR WHITE AND NON-WHITE UC TRANSFERS

Item	Mean		t	df	2-tail Prob.
	White	Non-White			
Internship/work related to major at MSAC	1.55 (56) S.D. 1.00	2.21 (48) S.D. 1.24	-2.97	102	.004
Being able to repeat a class at UC	1.77 (56) S.D. 1.10	2.36 (50) S.D. 1.14	-2.73	104	.007
Internship/work related to major at UC	2.40 (55) S.D. 1.33	3.00 (50) S.D. 1.03	-2.57	103	.012
Being able to drop a class at UC	2.07 (57) S.D. 1.08	2.57 (51) S.D. 1.12	-2.35	106	.021
Being able to repeat a class at MSAC	1.81 (58) S.D. 1.19	2.29 (51) S.D. 1.17	-2.13	107	.035

TABLE 69

MEAN SCORES FOR SELECTED FACULTY AND INSTRUCTIONAL PROGRAM VARIABLES FOR HOME LANGUAGE ENGLISH AND NON-ENGLISH UC TRANSFERS

Item	Mean English	Mean Non-English	t	df	2-tail Prob.
MSAC faculty knowledge of sbjct.	3.26 (54) S.D. 0.87	2.93 (54) S.D. 0.87	1.99	106	.049
Research opportun. for off-campus study at MSAC	1.53 (51) S.D. 0.92	1.93 (46) S.D. 1.04	-2.03	95	.045

Table 70 summarizes and compares the percent of important, very important responses from CSU and UC transfers about the significance of faculty and instructional programs in helping them reach their academic goals at Mt. San Antonio College. Both CSU and UC transfers rated clear deadlines for class assignments as number one. The next five variables rated by CSU transfers were: faculty who were well organized, faculty knowledge of subject, faculty giving me a class syllabus, faculty who were concerned and responsive to student needs, and faculty who renewed my confidence and self-esteem. UC transfers' next highest rated five were the same but in a different order. Second was faculty giving me a class syllabus, followed by: faculty who were well organized, faculty who were concerned and responsive to student needs, faculty

TABLE 70

VARIABLES SIGNIFICANT TO CSU AND
UC TRANSFERS' ACADEMIC SUCCESS AT MSAC

Very Imp./ Important	CSU (N=474)	%	UC (N=114)	%
Clear deadlines for class assignments	427	91.4	98	88.3
Faculty who were well organized	392	84.2	92	82.1
Faculty knowledge of subject	389	83.2	88	78.6
Faculty giving me a class syllabus	387	83.0	98	87.5
Faculty who were concerned and responsive to student needs	368	79.3	90	80.3
Faculty who renewed my confidence and self-esteem	286	62.3	76	66.7
Being able to drop a course	257	56.2	50	45.5
Faculty providing pertinent job related info.	231	50.2	98	50.4
Faculty providing advice and helping me develop my education goals	221	47.6	64	58.2
Being able to repeat a course	183	40.7	38	34.9
Internship/work exper. in major	145	32.7	27	26.0

TABLE 70, cont.

Very Imp./ Important	CSU (N=474)	%	UC (N=114)	%
Faculty providing contacts with career professionals in field	137	28.9	39	35.1
Research opportun. off campus study	110	26.0	23	22.8

knowledge of subject. for both CSU and UC transfers were: faculty giving me a class syllabus, faculty who were well organized, faculty knowledge of the subject, faculty who were concerned and responsive to student needs, and faculty who renewed my confidence and self-esteem.

Table 71 summarizes and compares the percent of important, very important responses from CSU and UC transfers about the significance of faculty and instructional programs in helping them reach their academic goals after they transferred to the California State University and the University of California. After the respondents transferred, the significance level of all the variables measured for MSAC and the four-year universities increased. Eleven of the thirteen were important, very important to over 50 percent of both CSU and UC transfers. The same top five identified as most significant at MSAC were also identified as most significant at CSU and UC. Those were: clear deadlines for class assignments, faculty giving me a class syllabus, faculty knowledge of

the subject, faculty who were well organized, and faculty who were concerned and responsive to student needs.

Some variables were more significant after the students transferred from MSAC. Faculty providing pertinent job information rose to 68.4 percent for CSU and 54.2 percent for UC transfers. Internship and work experience in my major rose to 60 percent at UC and 54.4 percent at CSU.

At CSU faculty helping me develop my career goals became very significant to 61.7 percent of the transfers. Faculty providing contacts with career professionals in my field also rose in significance after the student transferred to 53.2 percent at UC and 52.5 percent at CSU.

Discussion of Student Ratings of Personal and Faculty Variables

The summaries of student ratings of variables they considered important, very important to their academic success show a consistent pattern of both CSU and UC respondents identifying the same variable within a fairly close percentile range. The identification by both groups of self motivation as the number one personal variable reflects the findings of Cope and Hannah's (1975) review of the research on student persistence. They concluded that "personal commitment to either an academic or occupational goal is the single most important determinant of persistence in college" (Cope and Hannah, 1975, p. 19).

The literature on student persistence provides different views on the causes of student persistence. Astin

TABLE 71

VARIABLES SIGNIFICANT TO TRANSFERS' ACADEMIC SUCCESS AT CSU, UC

Very Imp./ Important	CSU (N=474)	%	UC (N=114)	%
Clear deadlines for class assignments	412	91.8	95	88.8
Faculty who were well organized	392	87.9	93	84.6
Faculty giving me a class syllabus	389	87.0	97	89.0
Faculty knowledge of subject	408	85.0	96	88.1
Faculty who were concerned and responsive to student needs	358	80.8	83	75.4
Faculty providing pertinent job related info.	303	68.4	59	54.2
Faculty who renewed my confidence and self-esteem	296	67.3	76	62.5
Faculty providing advice and helping develop my educ. goals	276	61.7	62	57.9
Internship work/ experience in major	240	54.4	63	60.0
Being able to drop a course	233	52.8	45	43.5
Faculty providing contacts with career professionals in field	231	52.5	58	53.2

TABLE 71, cont.

Very Imp./ Important	CSU (N=474)	%	UC (N=114)	%
Being able to repeat a course	179	41.5	38	35.8
Research opportunity off campus study	167	38.7	47	46.5
CSU/UC overseas study programs	53	12.9	16	16.2

(1975) found academic performance was statistically the strongest predictor of student persistence. Tinto (1975) based persistence more on the needs of students from higher social and economic levels to complete college as part of their academic self development rather than the means to get a job. According to Booth (1986), the combination of financial need and too many hours a week of employment was a major cause of community college attrition. According to Tinto (1987), outside work and family responsibilities can set up conflicts affecting student persistence. Tinto also found genuine commitment to established goals despite external variables is the key to persistence.

Tinto speaks of the problem of institutional socialization in non-residential, two-year colleges. He points to weak social systems in non-residential colleges "which work against the efforts of institutions to effectively integrate their students into the life of the institution" (p. 108).

According to both Booth (1986) and Polland (1983), parental support is crucial to student success. Booth noted a lack of parental support becomes more crucial as the student advances in semester levels. In Polland's study (1983), 48 percent of the regular admits and 79 percent of the special admits to California State University, Northridge identified support from adult family members as a reason for their academic success. Family members included parents and/or spouse. According to Booth (1986), "Cope and Hannah (1975), Pascarella and Terenzini (1978), and Tinto (1975), suggest that parental encouragement is the single most important factor leading to academic success" (p. 267).

Booth also rated student interaction with faculty and other outside role models as very significant to their academic success. According to Booth, "students can experience a complete academic turn-around simply because a concerned professor showed some special interest in that student's development" (p. 267). Tinto (1987) notes, "Contact with the faculty in informal settings outside the classroom is... a critical component to student persistence generally and to student intellectual development in particular" (p. 106). Tinto's research also found it was possible to be integrated into the social system of the college and "still depart because of an inability to establish competent membership in the academic domain of the college (e.g., failure to maintain adequate grades)" (p. 106).

The Importance of Student Services, and Campus Programs in Helping CSU and UC Transfers Reach Their Academic Goals

Table 72 shows the responses of CSU transfers to what degree college student services and campus programs were important in helping them reach their academic goals at MSAC and the University after they transferred. The highest rated important, very important at MSAC was the Transfer Center, 35.4 percent. The Transfer Center was not established at Mt. San Antonio College until February, 1985 and was not available to students who attended MSAC prior to that semester. The second highest rated variable was exhibitions on campus, 27.9 percent, followed by lectures on campus, 26.1 percent and orientation, 24.8 percent. Participation in collegiate sports was only important, very important to 11.6 percent of the respondents at MSAC. Perhaps this small percent was due to the California Community College requirement that students must be enrolled in twelve or more units to participate in collegiate sports.

At CSU the highest rated variable in this group was lectures on campus which went from 26.1 percent at MSAC to 41.6 percent at CSU. The other variables with significant percentage increases after the students transferred to CSU were: exhibitions on campus, health center, orientation, volunteer work related to my major, concerts/plays on campus, and campus clubs and organizations.

TABLE 72

THE IMPORTANCE OF STUDENT SERVICES AND CAMPUS PROGRAMS IN HELPING CSU TRANSFERS REACH THEIR ACADEMIC GOALS

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Lectures on campus									
MSAC	34	7.2	86	18.9	116	25.5	219	48.1	455
CSU	51	11.5	133	30.1	93	21.0	165	37.3	442
Exhibitions on campus									
MSAC	25	5.5	101	22.4	124	27.5	201	44.6	451
CSU	47	10.6	125	28.2	111	25.1	160	36.1	443
Transfer Center									
MSAC	56	12.4	104	23.0	53	11.7	239	52.9	452
CSU	33	7.7	62	14.4	64	14.9	271	63.0	430
Volunteer work related to major									
MSAC	58	12.8	50	11.0	88	19.4	257	56.7	453
CSU	77	17.6	67	15.3	69	15.8	225	51.4	438
Orientation									
MSAC	22	4.8	91	20.0	100	22.0	241	53.1	454
CSU	35	7.9	100	22.5	123	27.6	187	42.0	445

TABLE 72, cont.

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Health Center									
MSAC	40	8.8	59	12.9	79	17.3	279	61.1	457
CSU	73	16.4	93	10.9	80	17.9	200	44.8	446
Career Center									
MSAC	23	5.1	60	13.4	129	28.7	237	52.8	449
CSU	44	10.1	78	17.8	106	24.3	209	47.8	437
Guidance class									
MSAC	21	4.7	40	8.9	72	16.1	315	70.3	448
CSU	11	2.6	26	6.1	68	15.9	323	75.5	428
Concerts/plays on campus									
MSAC	26	5.7	57	12.5	120	26.4	252	55.4	455
CSU	37	8.4	89	20.1	113	25.5	204	46.0	443
Campus clubs and organizations									
MSAC	37	8.0	47	10.2	86	18.7	291	63.1	461
CSU	42	9.5	80	18.1	86	19.4	235	53.0	443
Leadership roles in campus activities									
MSAC	26	5.7	22	4.8	69	15.1	339	74.3	456
CSU	33	7.5	42	9.5	61	13.8	305	69.2	441

TABLE 72, cont.

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Handicapped student services									
MSAC	11	2.5	11	2.5	11	2.5	407	92.5	440
CSU	9	1.9	10	2.1	13	2.7	395	83.3	427
Participation in collegiate sports									
MSAC	31	6.9	21	4.7	37	8.2	361	80.2	450
CSU	16	3.7	21	4.8	38	8.7	361	82.8	436
EOPS/EOP									
MSAC EOPS	10	2.4	14	3.4	37	9.1	346	86.8	417
CSU EOP	9	2.2	15	3.7	72	16.1	315	85.0	407
Child Care Center									
MSAC	11	2.5	8	1.8	17	3.8	406	91.9	442
CSU	10	2.3	12	2.8	13	3.0	396	91.9	431
Leadership roles in student govt.									
MSAC	7	1.6	12	2.7	37	8.2	393	87.5	449
CSU	6	1.4	8	1.8	44	10.1	377	86.7	435

*Because of no responses in different categories, the number of valid cases in each category does not add to 474.

Table 73 shows the responses of UC transfers to what degree college student services and campus programs were important in helping them reach their academic goals at MSAC and the University after they transferred. All the variables except guidance classes and the health center were more significant for UC transfers at MSAC than they were for CSU transfers. The highest rated important, very important variable at MSAC was the Transfer Center, 39.2 percent. The second highest variable was lectures on campus, 29.7 percent, followed by campus clubs and organizations, 27.8 percent.

At UC the highest rated variable in this group was lectures on campus which went from 29.7 percent at MSAC to 62.2 percent at UC. The other variables with significant percentage increases after the students transferred were: exhibitions on campus to 38.8 percent, health center to 37.3 percent, volunteer work related to my major, 32.9 percent, and orientation, 30.4 percent.

The significant results of the t tests comparing college student services and campus program variables for CSU male and female are shown in Table 74. The table shows although participation in intercollegiate sports was not particularly important to either males or females, it was more important to males. Leadership roles in student government, campus clubs and organizations, and exhibitions at MSAC and CSU were more important to males. Concerts and plays at CSU were also more important to males

TABLE 73

THE IMPORTANCE OF STUDENT SERVICES AND CAMPUS PROGRAMS IN HELPING UC TRANSFERS REACH THEIR ACADEMIC GOALS

		Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Transfer Center										
MSAC	39.2	15	14.0	27	25.2	11	10.3	54	50.5	107
UC	26.2	10	9.7	17	16.5	18	17.5	58	56.3	103
Lectures on campus										
MSAC	29.7	14	13.0	18	16.7	29	16.9	47	43.5	108
UC	62.2	35	33.0	31	29.2	18	17.0	22	20.8	106
Campus clubs and organizations										
MSAC	27.8	10	9.3	20	18.5	17	15.7	61	56.5	108
UC	40.0	12	11.4	30	28.6	19	18.1	44	41.9	105
Career Center										
MSAC	27.3	6	5.5	24	21.8	29	26.4	51	46.4	110
UC	38.7	15	14.2	26	24.5	23	21.7	42	39.6	106
Volunteer work related to major										
MSAC	25.7	18	17.1	9	8.6	18	17.1	60	57.1	105
UC	43.8	29	25.4	21	18.4	11	9.6	42	36.8	103

TABLE 73, cont.

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Exhibitions on campus									
MSAC 25.2	12	11.2	15	14.0	33	30.8	47	43.9	107
UC 48.6	24	22.9	27	25.7	23	21.9	31	29.5	105
Concerts/plays on campus									
MSAC 22.9	11	10.5	13	12.4	20	19.0	61	58.1	105
UC 42.7	21	20.4	23	22.3	16	15.5	43	41.7	103
Health Center									
MSAC 20.0	8	7.3	16	14.7	17	15.6	68	62.4	109
UC 46.3	23	21.3	27	25.0	12	11.1	46	42.6	108
Orientation									
MSAC 16.7	6	5.6	12	11.1	19	17.6	71	65.7	108
UC 36.8	15	14.2	24	22.6	24	22.6	43	40.6	106
Participation in Inter-collegiate sports									
MSAC 16.9	13	12.9	4	4.0	12	11.9	72	71.3	101
UC 20.6	10	10.3	10	10.3	13	13.4	64	66.0	97
Leadership roles in campus activities									
MSAC 16.3	7	6.7	10	9.6	24	23.1	63	60.6	104
UC 20.8	8	7.9	13	12.9	28	27.7	52	51.5	101

TABLE 73, cont.

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
EOPS/SAA									
MSAC EOPS 7.0	3	2.6	5	4.4	8	7.0	84	73.7	100
UC SAA 20.2	9	9.1	11	11.1	8	8.1	71	71.7	99
Leadership roles in student govt.									
MSAC 7.0	4	4.0	3	3.0	8	7.9	86	85.1	101
UC 7.0	3	3.0	4	4.0	8	8.1	84	84.8	99
Guidance Class									
MSAC 6.6	2	1.9	5	4.7	19	17.8	81	75.7	107
UC 8.5	6	5.7	3	2.8	17	16.0	80	75.5	106
Child Care Center									
MSAC 3.6	2	1.8	2	1.8	1	0.9	104	91.2	109
UC 2.7	2	1.8	1	0.9	1	0.9	102	89.5	106
Handicapped student services									
MSAC 6.9	2	1.8	1	0.9	1	0.9	100	89.7	104
UC 22.0	6	5.9	1	1.0	1	1.0	94	92.2	102

*Because of no responses in different categories, the number of valid cases in each category does not add to 114.

TABLE 74

MEAN SCORES FOR SELECTED STUDENT SERVICES AND CAMPUS PROGRAM VARIABLES FOR MALE AND FEMALE CSU TRANSFERS

Item	Mean Male	Mean Female	t	df	2-tail Prob.
MSAC intercollegiate sports	1.58 (193) S.D. 1.01	1.24 (257) S.D. 0.70	4.18	448	.000
CSU intercollegiate sports	1.43 (189) S.D. 0.85	1.19 (247) S.D. 0.59	3.44	434	.001
Volunteer work related to major	1.78 (190) S.D. 1.03	2.15 (248) S.D. 1.25	-3.27	436	.001
CSU camp. center/ orgs.	1.99 (193) S.D. 1.04	1.72 (250) S.D. 1.01	2.80	441	.005
MSAC campus clubs/ orgs.	1.77 (198) S.D. 1.03	1.53 (263) S.D. 0.89	2.67	459	.008
MSAC student govt.	1.26 (192) S.D. 0.64	1.12 (246) S.D. 0.45	2.63	447	.009
CSU concerts/ plays	2.05 (192) S.D. 0.99	1.80 (251) S.D. 0.98	2.60	441	.010
CSU exhibit.	2.27 (194) S.D. 1.00	2.03 (249) S.D. 1.01	2.46	441	.014

TABLE 74, cont.

Item	Mean Male	Mean Female	t	df	2-tail Prob.
Volunteer work related to major at MSAC	1.66 (195) S.D. 0.95	1.90 (258) S.D. 1.15	-2.38	451	.018
CSU Health Center	1.95 (197) S.D. 1.10	2.20 (249) S.D. 1.17	-2.28	444	.023
CSU student govt.	1.24 (189) S.D. 0.61	1.13 (246) S.D. 0.42	2.28	443	.023
MSAC exhibit.	1.98 (195) S.D. 0.92	1.82 (256) S.D. 0.95	1.89	449	.059

and approach significance, .064, for males at Mt. San Antonio College. Leadership roles in campus activities also approached significance, .062, for males at MSAC. The CSU Health Center was more significant for females. Volunteer work related to major at MSAC and CSU was also more significant for females.

Table 75 compares the t test results of the same variables for White and non-White CSU respondents. The table shows Extended Opportunity Programs and Services (EOPS) at Mt. San Antonio College and Educational Opportunity Programs at CSU were more significant to non-White students. The career centers were also more significant

TABLE 75

MEAN SCORES FOR SELECTED STUDENT SERVICE AND CAMPUS PROGRAM VARIABLES FOR WHITE AND NON-WHITE CSU TRANSFERS

Item	Mean		t	df	2-tail Prob.
	White	Non-White			
MSAC EOPS	1.10 (253) S.D. 0.39	1.39 (164) S.D. 0.83	-4.84	415	.000
CSU EOP	1.12 (251) S.D. 0.43	1.40 (156) S.D. 0.81	-4.54	405	.000
Clubs/ campus orgs. MSAC	1.53 (285) S.D. 0.89	1.80 (176) S.D. 1.04	-3.01	459	.003
MSAC guid. class	1.40 (277) S.D. 0.78	1.60 (171) S.D. 0.93	-2.43	446	.016
MSAC career center	1.63 (277) S.D. 0.84	1.83 (172) S.D. 0.95	-2.34	447	.020
CSU career center	1.82 (275) S.D. 0.98	2.04 (162) S.D. 1.09			
Ldrship roles in stdnt. govt. MSAC	1.35 (284) S.D. 0.78	1.53 (172) S.D. 0.90	-2.22	454	.027
CSU transfer center	1.59 (269) S.D. 0.94	1.80 (161) S.D. 1.05	-2.19	428	0.29

to non-White students at both institutions. The CSU transfer center was more significant to non-White students. Campus clubs and organizations, guidance classes, and leadership roles in student government were more significant to non-White students at MSAC. Orientation at MSAC approached significance, .062, for non-Whites at MSAC, and CSU handicapped services approached significance, .060, for non-White students.

Table 76 compares the t test results of the same variables for home language English and non-English. The following variables were more significant at MSAC and CSU for students whose home language was not English: the career center, lectures on campus, EOPS and EOP, leadership roles in student government, exhibitions on campus, transfer center, handicapped services, and volunteer work related to my major. At MSAC only the following variables were more significant for students whose home language was not English: orientation, clubs/campus organizations, and leadership roles in campus activities.

Table 77 and 78 show the significant results of the t tests comparing college student services and campus program variables for White and non-White and home language English and non-English UC transfers. The t tests comparing these variables for male and female showed no significance. Table 77 shows the following variables were more significant for non-White students at both MSAC and UC: Extended Opportunity Programs and Services (EOPS) at

TABLE 76

MEAN SCORES FOR SELECTED STUDENT SERVICES AND CAMPUS PROGRAM VARIABLES FOR HOME LANGUAGE ENGLISH AND NON-ENGLISH CSU TRANSFERS

Item	Mean English	Mean Non-English	t	df	2-tail Prob.
MSAC career center	1.61 (287) S.D. 0.81	1.96 (127) S.D. 1.01	-3.76	412	.000
Lectures on campus at CSU	2.04 (282) S.D. 1.04	2.40 (129) S.D. 1.09	-3.22	409	.001
CSU EOP at CSU	1.16 (260) S.D. 0.52	1.38 (118) S.D. 0.78	-3.23	376	.001
Ldrship role in campus activ. MSAC	1.34 (289) S.D. 0.76	1.61 (132) S.D. 0.94	-3.19	419	.002
CSU transf. center	1.57 (275) S.D. 0.95	1.92 (122) S.D. 1.07	-3.19	395	.002
Lectures on campus MSAC	1.76 (287) S.D. 0.94	2.06 (134) S.D. 1.03	-2.93	419	.004
Exhibit. MSAC	1.84 (285) S.D. 0.90	2.08 (132) S.D. 1.00	-2.75	415	.006
Exhibit. CSU	2.04 (283) S.D. 0.99	2.33 (129) S.D. 1.07	-2.70	410	.007

TABLE 76, cont.

Item	Mean English	Mean Non-English	t	df	2-tail Prob.
Clubs/ campus orgs. MSAC	1.57 (2930 S.D. 0.93	1.82 (133) S.D. 1.03	-2.52	424	.012
MSAC EOPS	1.17 (265) S.D. 0.55	1.34 (121) S.D. 0.76	-2.52	384	.012
Ldrship roles in MSAC stud. govt.	1.15 (286) S.D. 0.52	1.29 (129) S.D. 0.64	-2.37	413	.018
MSAC transfer center	1.89 (288) S.D. 1.11	2.16 (130) S.D. 1.16	-2.29	416	.023
MSAC orient.	1.72 (288) S.D. 0.92	1.95 (130) S.D. 0.98	-2.29	416	.023
MSAC handic. serv.	1.11 (283) S.D. 0.51	1.24 (126) S.D. 0.67	-2.12	407	.035
CSU career center	1.84 (283) S.D. 1.00	2.07 (121) S.D. 1.09	-2.09	402	.037
CSU handicap. serv.	1.11 (276) S.D. 0.50	1.22 (122) S.D. 0.62	-1.98	396	.048
Ldrshp roles CSU stdt govt.	1.15 (280) S.D. 0.50	1.26 (125) S.D. 0.60	-1.94	403	.053

TABLE 76, cont.

Item	Mean English	Mean Non-English	t	df	2-tail Prob.
Volunteer work related to major CSU	1.89 (279) S.D. 1.13	2.13 (128) S.D. 1.21	-1.94	405	.053
Volunteer work related to major MSAC	1.70 (287) S.D. 1.00	1.90 (132) S.D. 1.15	-1.93	417	.055

TABLE 77

MEAN SCORES FOR SELECTED COLLEGE STUDENT SERVICES AND CAMPUS PROGRAM VARIABLES FOR WHITE AND NON-WHITE UC TRANSFERS

Item	Mean White	Mean Non-White	t	df	2-tail Prob.
UC SAA	1.14 (50) S.D. 0.50	2.02 (49) S.D. 1.20	-4.79	97	.000
UC guid. class	1.20 (54) S.D. 0.63	1.58 (52) S.D. 0.92	-2.46	104	.016
MSAC EOPS	1.13 (53) S.D. 0.52	1.43 (47) S.D. 0.83	-2.15	98	.034
UC orient.	1.89 (56) S.D. 1.02	2.39 (50) S.D. 1.14	-2.13	104	.035
MSAC orient.	1.40 (58) S.D. 0.75	1.76 (50) S.D. 1.02	-2.13	106	.036
UC child care ctr.	1.00 (56) S.D. 0.00	1.18 (50 S.D. 0.66	-2.04	104	.044

MSAC, Student Affirmative Action Program (SAA) at UC, and orientation. At UC orientation was more important than at MSAC. At UC only child care and guidance classes were more significant for non-White students.

The EOPS and the SAA programs were more significant for students whose home language was not English at Mt.

San Antonio College and at UC after they transferred. Three other variables, concerts and plays on campus, guidance classes, and the child care center, were more significant at UC for students whose home language was not English.

TABLE 78

MEAN SCORES FOR SELECTED COLLEGE STUDENT SERVICES AND CAMPUS PROGRAM VARIABLES FOR HOME LANGUAGE ENGLISH AND NON-ENGLISH UC TRANSFERS

Item	Mean English	Mean Non-English	t	df	2-tail Prob.
UC SAA	1.20 (44) S.D. 0.63	1.96 (50) S.D. 1.18	-3.80	92	.000
MSAC EOPS	1.09 (45) S.D. 0.36	1.40 (50) S.D. 0.81	-2.38	93	.019
UC guid. class	1.21 (48) S.D. 0.65	1.58 (53) S.D. 0.91	-2.37	99	.020
UC concerts/ plays	1.96 (50) S.D. 1.16	2.44 (48) S.D. 1.20	-2.00	96	.048
UC child care ctr.	1.00 (50) S.D. 0.00	1.18 (51) S.D. 0.65	-1.91	99	.059

Table 79 summarizes and compares the percent of important, very important responses from CSU and UC transfers about the significance of college student services

and campus programs in helping them reach their academic goals at Mt. San Antonio College. Both CSU and UC transfers rated the transfer center as number one. The next highest five for CSU transfers were: exhibitions on campus, lectures on campus, orientation, volunteer work related to my major, and the health center. The next highest five for the UC transfers were: lectures on campus, campus clubs/organizations, career center, volunteer work related to my major, and exhibitions on campus.

Table 80 summarizes and compares the percent of important, very important responses from CSU and UC transfers about the significance of college student services and campus programs at the universities after they transferred. The percent of important, very important increased for twelve of the variables after the students transferred to CSU and UC. Lectures on campus, rated number one by both CSU and UC transfers, rose to 41.6 percent at CSU and 62.2 percent at UC. The next three rated highest by each group were: exhibitions on campus, health center, and volunteer work related to my major. Concerts and plays on campus were rated 14.2 percent higher at UC than at CSU. Participation in intercollegiate sports was also significantly higher at UC, 20.6 percent versus 8.5 percent at CSU. The other significant difference was between EOP at CSU and SAA at UC. The SAA program was rated 20.6 percent versus 8.5 percent for the EOP.

TABLE 79

VARIABLES SIGNIFICANT TO CSU AND UC TRANSFERS' ACADEMIC SUCCESS AT MSAC

Very Imp./ Important	CSU (N=474)	%	UC (N=114)	%
Transfer center	160	35.4	42	39.2
Exhibitions on campus	126	27.9	27	25.2
Lectures on campus	120	26.1	32	29.7
Orientation	113	24.8	18	16.7
Volunteer work related to major	108	23.8	17	25.7
Health center	138	21.7	24	20.0
Career center	83	18.5	30	27.3
Concerts/plays on campus	83	18.2	24	22.9
Campus clubs/ organizations	84	18.2	30	27.8
Guidance class	61	13.6	7	6.6
Leadership roles in campus activit.	48	10.5	17	16.3
Participation in intercollegiate sports	52	11.6	17	16.9
EOPS	24	5.8	8	7.0
Handicapped student services	22	5.0	3	6.9
Child care center	19	4.3	4	3.6
Leadership roles in student govt.	19	4.3	7	7.0

TABLE 80

VARIABLES SIGNIFICANT TO TRANSFERS' ACADEMIC SUCCESS AT CSU, UC

Very Imp./ Important	CSU (N=474)	%	UC (N=114)	%
Lectures on campus	184	41.6	66	62.2
Exhibitions on campus	172	38.8	51	48.6
Health center	66	37.3	50	46.3
Volunteer work related to major	144	32.9	50	43.8
Orientation	135	30.4	39	36.8
Concerts/plays on campus	126	28.5	44	42.7
Career center	83	27.9	41	38.7
Campus clubs/ organizations	122	27.6	42	40.0
Transfer center	95	22.1	27	26.2
Leadership roles in campus activit.	75	17.0	21	20.8
Handicapped serv.	19	4.0	7	22.0
Guidance class	37	8.7	9	8.5
Participation in intercollegiate sports	37	8.5	20	20.6
EOP/SAA	24	5.9	20	20.2
Child care center	22	5.1	3	2.7
Leadership roles in student govt.	14	3.2	7	7.0

The Importance of Library Staff and Programs in Helping CSU and UC Transfers Reach Their Academic Goals

Table 81 shows to what degree CSU transfers felt library staff and programs were significant in helping them reach their academic goals at MSAC and CSU after they transferred. At MSAC, 76.2 percent of the CSU respondents rated a helpful library staff as important, very important to their academic success. After they transferred to CSU, the rating for this variable went to 80.4 percent. Using the library to help me complete class assignments also received high ratings at both institutions. The respondents rated this variable 73 percent important, very important at MSAC and 87 percent important, very important at CSU.

Table 82 shows to what degree UC transfers felt library staff and programs were significant in helping them reach their academic goals at MSAC and UC after they transferred. At MSAC, 71.9 percent of the UC respondents rated a helpful library staff as important, very important to their academic success. After they transferred, the rating for this variable went to 85.4 percent. Using the library to help complete class assignments also received high ratings at both institutions. The respondents rated this variable 70.5 percent important, very important at MSAC and 89.9 percent important, very important at UC. Using the library for information on different occupations and how to qualify for them was rated 42.7 percent.

TABLE 81

THE DEGREE LIBRARY STAFF AND PROGRAMS WERE IMPORTANT IN HELPING CSU TRANSFERS REACH THEIR ACADEMIC GOALS

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
A helpful library staff									
MSAC	190	41.6	158	34.6	60	13.1	49	10.7	457
CSU	210	47.3	147	33.1	52	11.7	35	7.9	444
Using the library to help me complete assignments									
MSAC	176	37.9	163	35.1	91	19.6	34	7.3	464
CSU	263	58.7	127	28.3	40	8.9	18	4.0	448
Orientation classes on how to use library to do college wk.									
MSAC	88	19.4	123	27.1	112	24.7	131	28.9	454
CSU	95	21.5	121	27.4	85	19.2	141	31.9	442
Using library for information on different occupations and how to qualify for them									
MSAC	62	13.4	82	17.8	131	28.4	186	40.3	461
CSU	75	16.9	102	23.0	109	24.5	158	35.6	444

TABLE 82

THE DEGREE LIBRARY STAFF AND PROGRAMS WERE IMPORTANT IN HELPING UC TRANSFERS REACH THEIR ACADEMIC GOALS

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
A helpful library staff									
MSAC	44	38.6	38	33.3	15	13.2	13	11.8	110
UC	56	50.9	38	34.5	8	7.3	8	7.3	110
Using the library to help complete class assign.									
MSAC	40	35.7	39	34.8	20	11.9	13	11.6	112
UC	68	62.4	30	27.5	7	6.4	4	3.7	109
Using the library for information on different occupations and how to qualify for them									
MSAC	21	19.1	26	23.6	32	29.1	31	28.2	110
UC	28	25.7	29	26.6	25	22.9	27	24.8	109

TABLE 82, cont.

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Orientation classes on how to use library for college work									
MSAC	21	18.9	22	19.8	35	31.5	33	29.7	111
UC	29	26.4	35	31.8	22	20.0	24	26.8	110

Because of no responses in different categories, the number of valid cases in each category does not add up to 114.

important very important at MSAC and 52.3 percent important, very important at UC. Orientation classes on how to use the library to do college work were significantly more important to these respondents after they transferred to UC.

The t test results comparing library staff and program variables for male and female CSU transfers are shown on Table 83. Though a helpful library staff at MSAC and CSU was very significant to both males and females, the variable was more significant to females at both institutions. Using the library to complete class assignments was also very important to both males and females at MSAC, but it was more significant to females.

The significant results for t tests comparing library staff and program variables for White and non-White CSU transfers on Table 84 showed though the four variables were all significant for White students at Mt. San Antonio College. They were more significant for non-White students.

The t test results on Table 85 comparing the library staff and program variables for CSU transfers whose home language was English and non-English show orientation classes on how to use the library to do college work and using the library for information on different occupations and how to qualify for them were very significant for both groups, but they were more significant for students whose home language was not English.

TABLE 83

MEAN SCORES FOR SELECTED LIBRARY STAFF AND PROGRAM VARIABLES FOR MALE AND FEMALE CSU TRANSFERS

Item	Mean		t	df	2-tail Prob.
	Male	Female			
Using library to complete assign. MSAC	2.90 (201) S.D. 0.94	3.14 (263) S.D. 0.92	-2.87	462	.004
Helpful library staff MSAC	2.93 (199) S.D. 1.07	3.17 (258) S.D. 0.90	-2.59	455	.010
Helpful library staff CSU	3.09 (194) S.D. 0.97	3.28 (250) S.D. 0.89	-2.11	442	.036

TABLE 84

MEAN SCORES FOR SELECTED LIBRARY STAFF AND PROGRAM VARIABLES FOR WHITE AND NON-WHITE CSU TRANSFERS

Item	Mean White	Mean Non-White	t	df	2-tail Prob.
Using library to complete assign. MSAC	2.92 (287) S.D. 0.99	3.23 (177) S.D. 0.80	-3.58	462	.000
Using library for info on dif. occupat. and how to qualify for them, MSAC	1.95 (285) S.D. 1.02	2.22 (176) S.D. 1.10	-2.77	459	.006
Helpful library staff MSAC	2.98 (284) S.D. 1.04	3.22 (173) S.D. 0.88	-2.55	455	.011
Orient. classes on how to use library for col. work, MSAC	2.28 (280) S.D. 1.09	2.52 (174) S.D. 1.10	-2.27	452	.024

TABLE 85

MEAN SCORES FOR SELECTED LIBRARY STAFF AND PROGRAM VARIABLES FOR HOME LANGUAGE ENGLISH AND NON-ENGLISH CSU TRANSFERS

Item	Mean English	Mean Non-English	t	df	2-tail Prob.
Using library for inf. on occup. and how to qualify MSAC	1.93 (292) S.D. 1.03	2.30 (132) S.D. 1.11	-3.29	422	.001
Using library for inf. on occup. and how to qualify CSU	2.13 (285) S.D. 1.07	2.47 (125) S.D. 1.17	-2.92	408	.004
Orient. classes on how to do col. work, CSU	2.35 (283) S.D. 1.15	2.59 (125) S.D. 1.13	-2.03	406	.043
Orient. classes on how to do col. work, CSU	2.32 (286) S.D. 1.12	2.53 (131) S.D. 1.07	-1.85	415	.064

The t test results comparing library staff and program variables for male and female UC transfers were not significant. Table 86 shows using the library at MSAC for information on different occupations and how to qualify for them was significant for both White and non-White UC students, but it was more significant for non-White students. This variable was also more significant for

students whose home language was not English at MSAC and CSU.

TABLE 86

MEAN SCORES FOR SELECTED LIBRARY STAFF AND PROGRAM VARIABLES FOR UC TRANSFERS

Item	Mean		t	df	2-tail Prob.
	White	Non-White			
Using library for inf. on dif. occup. and how to qualify MSAC	2.12 (57) S.D. 1.07	2.57 (53) S.D. 1.06	-2.18	108	.032
	English	Non-English			
Using library for inf. on dif. occup. and how to qualify MSAC	2.04 (51) S.D. 1.02	2.61 (54) S.D. 1.05	-2.82	103	.006
Using library for inf. on dif. occup. and how to qualify UC	2.20 (51) S.D. 1.11	2.83 (53) S.D. 1.01	-3.04	102	.003

Tables 87 and 88 summarize and compare the percent of important, very important responses from CSU and UC transfers about the significance of college library staff

TABLE 87

VARIABLES SIGNIFICANT TO CSU AND UC TRANSFERS' ACADEMIC SUCCESS AT MSAC

Very Important/ Important	CSU	%	UC	%
A helpful library staff	348	76.2	82	71.9
Using the library to help me complete class assignments	339	73.0	79	70.5
Orientation classes on how to use the library to do college work	211	46.5	43	38.7
Using the library for information on different occupations and how to qualify for them	144	31.2	47	42.7

TABLE 88

VARIABLES SIGNIFICANT TO TRANSFERS' ACADEMIC SUCCESS AT CSU AND UC

Very Important/ Important	CSU	%	UC	%
Using the library to help complete class assignments	390	87.0	98	89.9
A helpful library staff	357	80.4	94	85.4
Orientation classes on how to use the library to do college work	216	48.9	64	58.2
Using the library for information on different occupations and how to qualify for them	177	39.9	57	52.3

and programs to their academic success at MSAC and after they transferred to the University.

Table 87 shows a helpful library staff at MSAC received the highest rating by both CSU transfers, 76.2 percent, and UC transfers, 71.9 percent. Using the library to help me complete class assignments at MSAC was rated second by both. UC transfers rated using the library for information on different occupations and how to qualify for them third, and CSU transfers rated this variable fourth. The high ratings for all the library variables by the respondents show the significance of library staff and programs to students' academic success at Mt. San Antonio College.

Table 88 shows after the respondents transferred they rated the library variables one through four the same. Using the library to help complete class assignments was number one, followed by a helpful library staff, orientation classes on how to use the library to do college work, and using the library for information on different occupations and how to qualify for them. This variable received a significantly higher rating from the UC respondents, 52.3 percent versus 39.9 percent for the CSU respondents.

The Importance of Learning Assistance Classes, Tutorial Services, AMLA, and ESL Classes in Helping CSU and UC Transfers Reach Their Academic Goals

The majority of the CSU and the UC transfers did not rank any of the learning assistance variables as important, very important. One-fourth to one-third of the CSU and UC transfers who did rank learning assistance variables as important, very important selected learning assistance mathematics, writing, and reading classes; the Learning Assistance Laboratory and tutorial services. Both groups of transfers selected the same variables at MSAC and after they transferred to the California State University and the University of California. The t tests showed the variables were more significant for non-White transfers at UC than they were at Mt. San Antonio College.

Table 89 shows the responses of CSU transfers to what degree learning assistance classes, tutorial services, American Language (AMLA) and English as a Second

Language (ESL) classes were important in helping them reach their academic goals at MSAC and at the university after they transferred. Students rated important, very important learning assistance mathematics and writing classes as number one and number two at both MSAC and CSU. At MSAC reading classes, tutorial services, and the learning assistance lab were rated third, fourth, and fifth. Only 7.8 percent rated AMLA classes important, very important at MSAC and only 6.4 percent rated ESL classes at MSAC as important, very important. The important, very important rating for ESL classes at CSU was even smaller--5.4 percent. Student placement in credit American Language classes was not mandatory until Fall, 1987, which may account for the low percent of response on this variable. The program began in 1980.

Table 90 shows the responses of UC transfers to what degree learning assistance classes, tutorial services, American Language (AMLA) and English as a Second Language (ESL) classes were important in helping them reach their academic goals at MSAC and at the University after they transferred. The UC transfers ranked the following variables the same at MSAC and UC: learning assistance writing classes were ranked number one important, very important, followed by learning assistance mathematics and reading classes, tutorial services, learning assistance labs, AMLA, and ESL classes. More UC transfers rated American Language and English as a Second Language classes as important, very important.

The significant results of t tests comparing learning assistance class, tutorial service, AMLA and ESL class variables for CSU White and non-White students are shown on Table 91. There were no significant results for the t tests comparing these variables for male and female CSU students. Table 91 shows all of these variables were more significant at MSAC and CSU for non-White students. The most significant for non-White students at both institutions were the learning assistance mathematics and writing classes. The least significant variables for non-White students at both institutions were the ESL classes.

The significant results of t tests comparing learning assistance class, tutorial service, AMLA and ESL class variables for CSU students whose home language was English and non-English are shown in Table 92. The test results show all of the variables were more important at both MSAC and CSU for students whose home language was not English. The learning assistance mathematics and writing classes were more significant for these students at MSAC than at CSU. English as a Second Language classes were the least significant at both institutions.

The significant results of t tests comparing learning assistance class, tutorial service, AMLA and ESL class variables for White and non-White UC transfers are shown on Table 93. The t tests comparing these variables for males and females showed no significance. All the

TABLE 89

THE IMPORTANCE OF LEARNING ASSISTANCE CLASSES, TUTORIAL SERVICES, AMLA AND ESL CLASSES IN HELPING CSU TRANSFERS REACH THEIR ACADEMIC GOALS

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Learning assistance classes in mathematics									
MSAC	63	14.2	78	17.6	53	11.9	250	56.3	444
CSU	57	13.2	66	15.3	50	11.6	258	59.9	431
Writing									
MSAC	61	13.8	67	15.2	52	11.8	261	59.2	441
CSU	56	13.0	57	13.3	51	11.9	266	61.9	430
Learning assistance lab									
MSAC	43	9.8	64	14.5	58	13.2	276	62.6	441
CSU	45	10.7	48	11.4	54	12.8	275	65.2	422
Reading									
MSAC	45	10.2	56	12.7	45	10.2	295	66.9	441
CSU	38	8.9	45	10.6	42	9.9	301	70.7	426
Tutorial services									
MSAC	45	10.3	44	10.1	61	14.0	286	65.6	436
CSU	44	10.3	45	10.5	60	14.1	278	65.1	427

TABLE 89, cont.

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
American Language classes (AMLA)									
MSAC	21	5.0	12	2.8	16	3.8	373	88.4	422
English as a Second Language (ESL)									
MSAC	16	3.8	11	2.6	8	1.9	385	91.7	420
CSU	15	3.7	7	1.7	9	2.2	375	92.4	406

TABLE 90

THE IMPORTANCE OF LEARNING ASSISTANCE CLASSES, TUTORIAL SERVICES, AMLA AND ESL CLASSES IN HELPING UC TRANSFERS REACH THEIR ACADEMIC GOALS

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
Learning assistance classes									
Writing									
MSAC	22	20.6	14	13.2	9	8.4	62	59.9	107
UC	25	23.8	10	9.5	6	5.7	64	61.0	105
Mathematics									
MSAC	16	15.1	16	15.1	10	9.5	64	60.4	106
UC	19	18.5	13	12.6	7	6.8	64	62.1	103
Reading									
MSAC	15	14.0	13	12.2	11	10.3	68	63.5	107
UC	17	16.4	8	7.7	11	10.6	68	65.3	104
Tutorial services									
MSAC	15	14.2	9	8.5	13	12.3	69	65.1	106
UC	17	16.5	13	12.6	14	13.6	59	57.3	103
Learning assistance lab									
MSAC	17	16.0	6	5.7	14	13.2	69	65.1	106
UC	15	14.4	9	8.7	15	14.4	65	62.5	

TABLE9 90, cont.

	Very Import.	%	Import.	%	Not too Import.	%	Unimp.	%	No.
American Language classes									
MSAC	6	6.0	6	6.0	4	4.0	84	84.0	100
English as a Second Language classes									
MSAC	5	5.1	6	6.1	3	3.0	85	85.9	99
UC	4	4.1	5	5.1	2	2.0	87	88.8	98

TABLE 91

MEAN SCORES FOR SELECTED LEARNING ASSISTANCE, TUTORIAL, AMLA AND ESL VARIABLES FOR WHITE AND NON-WHITE CSU TRANSFERS

Item	Mean White	Mean Non-White	t	df	2-tail Prob.
MSAC writing class	1.68 (271) S.D. 1.04	2.09 (170) S.D. 1.22	-3.85	439	.000
MSAC learning assist. lab	1.55 (268) S.D. 0.93	1.97 (173) S.D. 1.15	-4.15	439	.000
MSAC tutorial services	1.49 (267) S.D. 0.91	1.90 (169) S.D. 1.15	-4.09	434	.000
MSAC reading class	1.52 (271) S.D. 0.93	1.89 (170) S.D. 1.17	-3.75	439	.000
CSU tutorial services	1.52 (265) S.D. 0.93	1.88 (162) S.D. 1.14	-3.54	425	.000
MSAC English Second Lang. class	1.10 (258) S.D. 0.48	1.33 (162) S.D. 0.86	-3.54	418	.000
CSU reading class	1.45 (264) S.D. 0.88	1.79 (162) S.D. 1.13	-3.50	424	.001
MSAC math class	1.75 (272) S.D. 1.06	2.13 (173) S.D. 1.23	-3.45	442	.001

TABLE 91, cont.

Item	Mean		t	df	2-tail Prob.
	White	Non-White			
CSU math class	1.70 (269) S.D. 1.06	2.02 (162) S.D. 1.19	-2.90	429	.004
CSU English Second Language class	1.10 (253) S.D. 0.49	1.28 9153) S.D. 0.80	-2.85	404	.005
CSU learning lab	1.56 (262) S.D. 0.95	1.86 (160) S.D. 1.17	-2.81	420	.005
MSAC American Language class	1.17 (258) S.D. 0.59	1.37 (164) S.D. 0.91	-2.73	420	.007
CSU writing class	1.67 (266) S.D. 1.05	1.94 (164) S.D. 1.18	-2.44	428	.015

variables were more significant for non-White students. The most significant at Mt. San Antonio College was the learning assistance reading class, followed by tutorial services and the learning assistance laboratory. Though American Language and English as a Second Language classes were more significant to non-White students, their degree of importance was much lower than the other variables.

The significant results of t tests comparing learning assistance class, tutorial service, AMLA, and ESL class variables for UC transfers whose home language was English and non-English are shown in Table 94. All the variables were more significant at both MSAC and UC for students whose home language was not English. The most significant variable at MSAC was learning assistance reading class, followed by the AMLA and ESL classes. The most significant variable after the students transferred was the UC learning assistance writing class followed by the UC learning assistance reading class and the UC learning assistance laboratory. Though English as a Second Language classes were significant to non-White students after they transferred to UC, their degree of importance was much lower than the other variables.

Tables 95 and 96 summarize and compare the percent of important, very important responses from CSU and UC transfers about the significance of learning assistance classes, tutorial services, AMLA and ESL classes to their

TABLE 92

MEAN SCORES FOR SELECTED LEARNING ASSISTANCE, TUTORIAL, AMLA AND ESL VARIABLES FOR HOME LANGUAGE ENGLISH AND NON-ENGLISH CSU TRANSFERS

Item	Mean English	Mean Non-English	t	df	2-tail Prob.
MSAC math class	1.70 (280) S.D. 1.06	2.35 (130) S.D. 1.20	-5.49	408	.000
MSAC writing class	1.66 (277) S.D. 1.03	2.23 (130) S.D. 1.23	-4.91	405	.000
CSU math class	1.64 (273) S.D. 1.04	2.20 (126) S.D. 1.19	-4.78	397	.000
CSU writing class	1.63 (271) S.D. 1.02	2.11 (127) S.D. 1.22	-4.10	396	.000
MSAC reading class	1.51 (277) S.D. 0.95	2.02 (130) S.D. 1.18	-4.69	405	.000
MSAC learning lab	1.58 (276) S.D. 0.95	2.02 (131) S.D. 1.15	-4.14	405	.000
MSAC tutorial services	1.49 (275) S.D. 0.92	1.96 (126) S.D. 1.14	-4.38	399	.000
CSU tutorial services	1.59 (272) S.D. 0.92	1.96 (122) S.D. 1.17	-4.09	392	.000

TABLE 92, cont.

Item	Mean English	Mean Non-English	t	df	2-tail Prob.
CSU reading classes	1.42 (267) S.D. 0.87	1.94 (127) S.D. 1.17	-4.95	392	.000
CSU learning lab	1.55 (267) S.D. 0.95	1.93 (124) S.D. 1.18	-3.33	389	.001
MSAC American Language class	1.19 (269) S.D. 0.65	1.39 (122) S.D. 0.91	-2.52	389	.012
MSAC English Second Language class	1.19 (267) S.D. 0.50	1.39 9122) S.D. 0.91	-4.09	387	.000
CSU Eng. Second Language class	1.08 (260) S.D. 0.44	1.35 (117) S.D. 0.87	-3.99	375	.000

TABLE 93

MEAN SCORES FOR SELECTED LEARNING ASSISTANCE, TUTORIAL, AMLA AND ESL VARIABLES FOR WHITE AND NON-WHITE UC TRANSFERS

Item	Mean White	Mean Non-White	t	df	2-tail Prob.
UC writing class	1.52 (54) S.D. 1.04	2.43 (51) S.D. 1.38	-3.85	103	.000
UC learning lab	1.30 (53) S.D. 0.72	2.22 (51) S.D. 1.25	-4.57	102	.000
MSAC American Language class	1.04 (52) S.D. 0.28	1.67 (48) S.D. 1.10	-3.99	98	.000
UC Rdg. class	1.39 (54) S.D. 0.90	2.14 (50) S.D. 1.28	-3.49	102	.001
MSAC tutorial services	1.40 (55) S.D. 0.83	2.06 (51) S.D. 1.27	-3.18	104	.002
UC tutorial services	1.55 (53) S.D. 0.91	2.24 (50) S.D. 1.30	-3.14	101	.002
MSAC reading class	1.45 (55) S.D. 0.94	2.10 (52) S.D. 1.23	-3.05	105	.003
MSAC learning lab	1.42 (55) S.D. 0.91	2.06 (51) S.D. 1.26	-3.02	104	.003

TABLE 93, cont.

Item	Mean White	Mean Non-White	t	df	2-tail Prob.
UC ESL class	1.04 (50) S.D. 1.04	1.46 (48) S.D. 1.46	-2.93	96	.004
MSAC ESL class	1.04 (50 (48) S.D. 0.28	1.46 S.D. 0.97	-2.93	96	.004

TABLE 94

MEAN SCORES FOR SELECTED LEARNING ASSISTANCE, TUTORIAL, AMLA AND ESL VARIABLES FOR HOME LANGUAGE ENGLISH AND NON-ENGLISH UC TRANSFERS

Item	Mean English	Mean Non-English	t	df	2-tail Prob.
UC learning assist. reading	1.38 (48) S.D. 0.89	2.18 (51) S.D. 1.28	-3.60	97	.000
UC learning assist. writing	1.59 (49) S.D. 1.08	2.41 (51) S.D. 1.39	-3.29	98	.001
MSAC learning assist. reading	1.46 (50) S.D. 0.95	2.13 (52) S.D. 1.22	-3.10	100	.002
MSAC American Language class	1.09 (46) S.D. 0.41	1.61 (49) S.D. 1.08	-3.10	93	.003
UC Eng. Second Language class	1.04 (45) S.D. 0.30	1.46 (48) S.D. 0.97	-2.75	91	.007
UC learning lab	1.48 (48) S.D. 0.92	2.08 (51) S.D. 1.23	-2.73	97	.008
MSAC English Second Language	1.11 (45) S.D. 0.53	1.51 (49) S.D. 0.98	-2.42	92	.017

academic success at MSAC and after they transferred to the university.

Table 95 shows learning assistance writing classes received the highest important, very important rating from UC transfers followed by learning assistance mathematics classes, reading classes, tutorial services, and the learning assistance laboratory. CSU transfers rated learning assistance mathematics classes number one, followed by writing classes, the learning assistance laboratory, the reading classes, and the tutorial services. More UC than CSU transfers rated AMLA and ESL as

TABLE 95

VARIABLES SIGNIFICANT TO CSU AND UC TRANSFERS' ACADEMIC SUCCESS AT MSAC

Very Important/ Important	CSU	%	UC	%
Learning assistance classes				
Mathematics	141	31.8	32	30.2
Writing	128	29.0	36	33.7
Reading	101	22.9	28	26.2
Learning assistance lab	107	24.3	23	21.7
Tutorial services	89	20.4	24	22.7
American Language classes at MSAC	33	7.8	12	12.0
English as a Second Language classes	27	6.4	11	11.2

important, very important, although the percent of students who rated these two variables important, very important was much lower.

Table 96 shows learning assistance classes, tutorial services, and the learning assistance laboratory were more significant to UC students after they transferred than they were to CSU students. Learning assistance writing classes at UC received the highest rating, followed by UC learning assistance mathematics classes and tutorial services. CSU transfers gave the highest important, very important rating to CSU learning assistance mathematics and writing classes, followed by CSU learning assistance laboratory and tutorial services. English as a Second

TABLE 96

VARIABLES SIGNIFICANT TO TRANSFERS' ACADEMIC SUCCESS AT CSU AND UC

Very Important/ Important	CSU	%	UC	%
Learning assistance classes				
Mathematics	123	28.5	32	31.1
Writing	113	26.3	35	33.3
Reading	83	19.5	25	24.1
Learning assistance lab	93	22.1	24	23.1
Tutorial services	89	20.8	30	29.1
English as a Second Language class	22	5.4	9	9.2

Language classes received much lower important, very important ratings than the other variables from both CSU and UC transfers.

The preceding data show over one-fourth to one-third of the respondents believed learning assistance mathematics and writing classes, the learning assistance laboratory,

and tutorial services were significant to their academic success. These services were important, very important to the respondents both at Mt. San Antonio College and at the universities after they transferred. The place of developmental courses and programs such as these in the college curriculum has long been debated. According to Rouche and Baker (1987), "developmental courses are at the heart of an open door college" (p. 72).

Miami Dade College in Florida is one community college in the United States that has carefully tracked their students in developmental courses. Research done at Miami Dade by Garcia and Romanik (1984) shows, "students enrolled in two or three developmental courses in their first term were more likely to drop and had a lower retention rate than students enrolling in a single developmental course" (p. 50). Other Miami Dade research by Losak and Morris (1983) showed that students who did not take remedial work their first semester had equal or higher retention than students who did.

Garcia and Romanik (1984) indicated there are other variables to be considered in comparing retention and graduation rates of students who did and did not take developmental courses, including previous education, motivation, future academic plans, and attitudes toward school. The results of this research supports their position.

In Florida, community college students are required to take the CLAST test to receive an A.A. degree or to transfer from a community college to a state university. According to Rouche and Baker (1987), in Spring, 1985, 87.5 percent of Miami Dade students "who passed all four CLAST subtests represented a better performance than that of students at the local universities, both of which admit only well qualified students" (p. 85).

Hall's 1987 retrospective study of all students enrolled in Mt. San Antonio College Learning Assistance classes also supports the position that multiple variables are related to student success. Hall found through "transcript analysis of persisters and non-persisters that test scores alone were not predictors of student success" (p. 1). The persisters in Hall's study were

> ... synonymous with Aesop's tortoise who persisted until he finished the race. Their path was not swift nor smooth, but they were doggedly persistent, often repeating courses until they were successful. The analysis of their transcripts indicates that concurrent enrollment in one or more learning assistance classes increased success in other college classes (p. 16).

Only 14 percent of the 12,079.6 credit units completed by the students in Hall's study were in learning assistance classes. The majority of the units (86 percent) completed by these students were in credit classes. Forty-nine percent of these units were transferable to CSU and UC. Sixty-five percent of the persisters in Hall's study were members of ethnic groups other than white, 26

percent were Asian, 11 percent were black, and 28 percent were Hispanic.

CSU, UC Transfer Responses to Open Question About MSAC Role in Helping Them Reach Their Academic Goals

At the end of the survey the respondents were asked to "please take the time to share any feelings you wish to about the role MSAC played in helping you reach your academic goals. Three hundred sixty-one (76 percent) of the CSU transfers and 76 (67 percent) of the UC transfers) responded to this question. Many wrote lengthy responses mentioning specific faculty and others who had assisted them when they were at Mt. San Antonio College. All the responses were put into a computer file. After reading all the responses, the researcher developed the response categories on Table 97. Three outside evaluators read the responses and placed them in the categories.

Both CSU and UC respondents rated the high quality accessibility and helpfulness of faculty and staff number one and Mt. San Antonio College as being a vital link for them to higher education as number two. This category received a 14.9 percent higher rating from UC transfers. UC transfers gave third and fourth ratings to helping me decide major and career goals and gave me confidence and motivation to go on. CSU transfers' third and fourth ratings were the opportunity to complete general education requirements before going on and gave me confidence and motivation to go on. Though both CSU and UC transfers

rated this category fourth, the UC transfers rated it 12.6 percent higher than did the CSU transfers.

TABLE 97

CSU, UC TRANSFER RESPONSES TO OPEN QUESTION ABOUT MSAC ROLE IN HELPING THEM REACH THEIR ACADEMIC GOALS

Response Categories	CSU (N=361)	%	UC (N=76)	%
1. High quality accessibility and helpfulness of faculty and staff	151	41.8	35	46.1
2. Vital link to higher education	84	23.3	29	38.2
3. Opportunity to complete general ed. requirements before transferring	71	19.7	12	15.8
4. Helped me decide major and career goals	54	15.0	21	27.6
5. Affordable education close to home	45	12.5	9	11.8
6. Gave me confidence and motivation to go on	43	11.5	20	26.3
7. Helped develop basic skills to go on	40	11.1	16	21.1
8. MSAC counselors did not help me	30	8.3	9	10.5
10. Academic work at MSAC did not prepare me for CSU or UC	17	4.7	11	14.5
11. Other	76	21.1	21	27.6

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH

Purpose and Importance of the Research

The purpose of the research was to discover which variables students identified as being significant to their academic success, first at Mt. San Antonio Community College and then after they transferred to the California State University or the University of California. Taking the nature of their college experience as a variable, the study was designed for students to retrospectively identify significant persons, instructional, and student service programs. As the literature review showed, there is a scarcity of studies on community college transfers to four year colleges and universities.

The research on student persistence has dealt mainly with full time students at four year colleges. The first national study of students transferring from community colleges to four year colleges was done by Knoell and Medsker (1965). This study compared community college transfers with native four year college students. The Knoell-Medsker study presented important findings on variables associated with student success. However,

their study population reflected the age, ethnicity, sex, and socioeconomic background of college students in the sixties.

Since the sixties, the community college transfer population has changed. In the last twenty-nine years more minorities, women, part-time, and older students have been entering California Community Colleges and transferring to the California State University and the University of California. The Mt. San Antonio College transfer population reflects this new diversity. Fifty-six percent of those who transferred to the University of California between 1982 and 1985 were minority students, and 52 percent were female. Thirty-four percent who transferred to the California State University between 1978 and 1987 were minority students, and 51.6 percent were female. The average transfer age was 26.3 with a range from 17 to 73 years.

The study sought to learn which instructional and student service programs were effective for the new transfer population. The question of what helped them progress from a community college to a four year college was largely unanswered. Responses to the survey questions from California State University and University of California transfers are compared throughout the study to see if different variables were more significant for one group or the other. Significant t test comparisons by

gender, ethnicity, and home language are reported and discussed.

The Political Implications of Changes in Community College Transfer Rates

Although California Community College enrollment had increased dramatically during the seventies, California Post-Secondary Education Commission (CPEC, 1982-1986) studies showed there were fewer students transferring to the state universities. These studies showed a decline in the number of transfers, particularly Black and Hispanic. There were accusations that vocational programs, adult education, and community service programs had adversely affected the transfer program. The criticism implied that the runaway growth of these programs had turned community colleges away from their historic function of preparing students to transfer to four year colleges and universities.

The growing criticism increased the mounting pressure on the legislature to develop a new educational master plan. Among the final recommendations of the plan published in 1987 was a mandate to the three segments of higher education in California to work together toward improving the transfer rate in order that more students might move successfully from community colleges to the two university systems. Clearly the time for identifying the variables important in assisting students to reach their

academic goal to successfully transfer from a community college to a state university had arrived.

Barriers to the Evaluation of the Community College Transfer Function

There have been two major barriers to accurately assessing how well California Community Colleges are performing the transfer function. The first has been the lack of a complete transfer data base and a system of tracking all students who transfer from community colleges to public and private four year colleges and universities. The second has been the lack of an accurate data base of community college students who actually plan to transfer.

Comparisons showing the number of Fall transfers and the total credit enrollment has produced a highly skewed impression of the transfer rate because these comparisons fail to exclude reverse transfers, concurrent enrollees (students enrolled at a community college as well as a four year college), and students enrolled to develop and upgrade job skills with no intention of transferring.

Mt. San Antonio College Transfer Data Base

The sample population for this study was drawn from a new transfer data base developed by the Mt. San Antonio College Information Services. The data base was created through a cooperative effort between Mt. San Antonio College, the California State University, and the University of California.

In 1985, Mt. San Antonio College started the development of a computerized transfer data base. Its creation reflected a growing concern among California Community Colleges that information on student flow from their campuses to the state universities was incomplete. The universities agreed to compare Mt. San Antonio College total enrollment tapes against their enrollment records and to identify all students who had attended the universities. The University of California agreed to begin the comparison with the 1982 academic year. The California State University agreed to make the same comparison beginning the Summer of 1978.

Summary of Findings

Analysis of the New Transfer Data Base

The Mt. San Antonio College Transfer Reporting System (MSACTRS) identified 22,086 former MSAC students who attended one of the California State Universities between the Summer of 1978 and the Spring of 1987. It identified 1,183 former MSAC students who attended the University of California between 1982 and 1985. The MSACTRS analysis verified that transfers from Mt. San Antonio College to the state universities had been under reported. The annual CPEC reports of Fall transfers from Mt. San Antonio College to CSU and UC had shown only a fraction of the students who had gone between these institutions.

Demographic Comparison
CSU and UC Respondents
Ethnicity, Gender, Age

Mt. San Antonio College, the California State University, and the University of California all have different ethnic codes for students. For this reason, the study ethnic codes were established as Asian, Black, Hispanic, White, and Other. The Other category included American Indian, Alaskan Native, East Indian, Pakistani, Other, and Declined to State. The CSU survey responders were 7.8 percent Asian, 4 percent Black, 11.2 percent Hispanic, 61.8 percent White, and 15.2 percent Other. They were 56.8 percent female and 46.5 percent male. The UC respondents were 11 percent Asian, 3 percent Black, 25 percent Hispanic, 54 percent White, 7 percent Other. They were 53.5 percent female and 46.5 percent male.

The CSU transfers who completed 24 or more units at MSAC were older when they entered the college than the UC transfers. The average age for first semester CSU female was 21.8 years and for males 19.8. The UC first semester females averaged 18.2 years and the males 18.8 years. The number of years both groups spent at MSAC shows an enrollment pattern of students who took much longer than the traditional two years to transfer to a four year college. The male CSU respondents averaged 5.9 years at MSAC, and the females averaged 6.3 years. The UC male respondents averaged 3.3 years and the females 3.5 years.

High Schools Attended by Respondents

The majority of CSU and UC respondents attended high school in the MSAC District. More CSU transfers, 31.4 percent, attended out of district high schools, and more UC transfers (5 percent) attended high schools outside the United States. More of the CSU respondents had delayed entry into college after high school graduation. Only 30.7 percent graduated from high school between 1980 and 1986, compared to 71.8 percent of the UC respondents who graduated between 1980 and 1985.

Academic Goals and Degrees Earned by Survey Respondents

The majority of both groups, 69.9 percent of the CSU and 73.7 percent of the UC transfers, started MSAC with the academic goal of earning a Bachelor's degree. Over 18 percent (18.3) of the CSU and 10.9 percent of the UC transfers entered MSAC with the academic goal of Associate Degree in Arts or Science only. More UC transfers (13.6 percent) than CSU transfers (9.6 percent) reported being undecided when they entered MSAC about their educational goals. Bachelor's degrees earned were reported by 72.8 percent of the UC and 59.7 percent of the CSU respondents. Master's degrees were reported by 5.9 percent of the CSU and 4.4 percent of the UC respondents. Over 22 percent (22.8) of the UC respondents and 14.6 percent of the CSU respondents reported still being undergraduates. More UC respondents (18.4 percent) reported being graduate

students. Only 5.7 percent of the CSU respondents reported being in graduate school.

CSU and UC Campuses Attended by MSAC Transfers

The highest number of CSU respondents transferred to the CSU campus closest to Mt. San Antonio College. Forty-nine percent transferred to CSU Pomona and 26 percent to CSU Fullerton. The largest number of UC transfers (26.3 percent) went to UCLA, 22 percent transferred to UC Irvine, 18.4 percent to UC Riverside, and 14 percent to UC Santa Barbara.

Transfers' Employment While Attending MSAC and the Universities

One hundred of the UC transfers (87.7 percent) reported being employed while attending Mt. San Antonio College. The response was the same from the CSU transfers. four hundred and eight (86 percent) said they were employed while attending MSAC. After they transferred, 80 percent of the students were employed while they attended CSU, and 75 percent were employed while they attended UC. While attending MSAC, 59 percent of the CSU transfers worked from 21 to over 30 hours per week. Fifty-four percent of the UC transfers worked the same number of hours per week while at MSAC. After they transferred, the percent of CSU students who worked 21 to over 30 hours per week increased to 66.2 percent. The number of UC students who worked the same number decreased to 41.8 percent.

The research found a higher percentage of employed females than males in both groups and a higher number of hours worked per week by females than males. While attending MSAC, 60 percent of the female UC transfers reported working 21 to over 30 hours per week compared to 48 percent of the males. After transfer to UC, these percentages changed to 52 percent of the females and 32 percent of the males.

Transfers' Current Occupations

Only 1.9 percent of the CSU and 2.8 percent of the UC transfers reported themselves as unemployed. The largest number of former CSU students (22.3 percent) were in business. The second highest number (13.3 percent) were in education. The third (9.2 percent) were in finance, and the fourth (7.3 percent) were in medical occupations. Business was also the number one occupation for the UC respondents (14.7 percent). Education and finance tied for second (8.2 percent), and third was medical occupations (6.4 percent).

Respondents' Parents' Education Level

The majority of the respondents came from families where both parents had not attended college. Over 55 percent (55.5) of the CSU respondents' mothers had not attended college, and 36.2 percent of the UC respondents' mothers had not attended.

Survey Respondents' Home Language and Early Literacy Environment

Research has shown a positive correlation between success in reading and early access to books and libraries. The research suggests a link between a rich early literacy environment and future academic success. It was considered important to learn what these transfer students' early literacy environment was at home and in school. It was also important to learn the language or languages that were spoken in their homes when they were children and if they attended bilingual classes.

Home Language and Bilingual Classes

The majority of the UC respondents (52.6 percent) listed their homes as non-English speaking or bilingual compared to 37.2 percent of the CSU transfers. Very few of the responders reported attending bilingual classes in elementary school or junior high school. The majority who reported attending bilingual classes did so in high school. Over 25 percent (25.4) of the CSU responders were enrolled in high school bilingual classes. Of these, 61.1 percent listed English as their home language, and 24.1 percent came from bilingual homes. Only 26.7 percent of the UC responders were enrolled in high school bilingual classes. Of these, 46.4 percent listed their home language as English, and 28.6 percent were bilingual. The high percent of respondents who reported coming from English speaking homes who also reported attending

bilingual classes in high school was a surprising finding. The preceding data suggests that bilingual classes did not play a major role in the academic success of the CSU and UC transfers.

Based on this evidence, we may draw the same conclusion for all students as Buriel and Cardoza (1988) did for Mexican-American students that the important linguistic factor that accounts for student achievement may be English proficiency.

Early Literacy Environment

Books were important, very important to 82.6 percent of the CSU transfers and 76.8 percent of the UC transfers while they were growing up. The t test scores for male and female responses to this question showed that although both CSU and UC respondents felt books were very important to them while they were growing up, they were more important to the females. Cross tabulation by home language showed 84.5 percent of the CSU respondents and 75.9 percent of the UC respondents whose home language was English reported books were important, very important to them while they were growing up. The UC responders from non-English speaking homes reported a higher percent (78.2), and the CSU responders from non-English speaking homes reported a lower percent (77.7). Over 88 percent (88.9) of the CSU and 87.4 percent of the UC responders reported being read to occasionally or often when they were children. A higher percent of the responders from English

speaking homes, 93.3 percent of the CSU and 94.4 percent of the UC, reported being read to occasionally or often when they were children. Both groups reported mothers or stepmothers as the ones who read to them most often. Teacher was second (45.6 percent) for both CSU and UC respondents. The fact that the majority of the respondents did not report their teachers reading to them was a surprising finding from these data.

Significantly more of the respondents whose home language was not English reported their parents did not receive a daily newspaper, 27.2 percent of the CSU and 34.5 percent of the UC respondents. Over 88 percent (88.2) of the UC transfers and 83.8 percent of the CSU transfers reported watching television before they started school. Over 93 percent (93.7) of the CSU transfers and 88.3 percent of the UC transfers reported visiting a library occasionally or often when they were children. Over 11 percent (11.6) of the UC transfers and 6.3 percent of the CSU transfers reported never visiting a library when they were children. Almost 100 percent (96.9) of the CSU and 96.3 percent of the UC respondents reported libraries in the high schools they attended. Smaller majorities in both cases reported libraries in their junior high schools. Over 27 percent (27.2) of the CSU transfers and 24.3 percent of the UC transfers reported no libraries in the elementary schools they attended.

The Role of Self Motivation and Significant Others in Assisting CSU, UC Transfers in Reaching Their Academic Goals

My self motivation received the highest rating from the respondents both at MSAC and at the universities. At MSAC self motivation was rated important, very important by 91.3 percent of the CSU transfers and 87.9 percent of the UC transfers. At the universities this rating grew to 95.8 percent of the CSU transfers and 95.3 percent of the UC transfers. The t test results showed that although self motivation was highly significant for both male and female CSU transfers, it was more significant for the females.

Ratings for Significant Others

At MSAC mother/stepmother received the highest rating from both CSU and UC transfers followed by friends I met at MSAC, father/stepfather, faculty member, friends I studied with, and friends who had the same major. After they transferred, CSU students gave the highest rating to friends who had the same major, and UC students rated first friends I met at the university, followed by friends I studied with at the university, faculty member, mother/stepmother, father/stepfather, and friends off campus. The t test results showed that although friends with the same major were very significant to both White and non-White students, they were more important to White students. They also showed the support of a spouse was more

significant to females both at MSAC and CSU. Studying with friends and friends who had the same major were more significant to CSU and UC transfers whose home language was not English.

The Eight Highest Rated Instructional Variables

From the seventeen instructional variables in the survey, both the CSU and UC respondents selected the same eight as being the most significant in helping them reach their academic goals. Both sets of respondents rated clear deadlines for class assignments as number one at Mt. San Antonio College followed by: faculty giving me a class syllabus, faculty who were well organized, faculty knowledge of the subject, faculty who were concerned and responsive to student needs, a helpful library staff, using the library to help me complete class assignments, and faculty who renewed my confidence and self-esteem. The highest rated variables changed slightly after the students transferred to the University of California and the California State University. Clear deadlines for class assignments was rated number one by the CSU transfers. The UC transfers rated as number one using the library to help me complete class assignments. Faculty giving me a class syllabus was rated second, and clear deadlines for class assignments was rated third. Faculty who renewed my confidence and self-esteem dropped out of the top eight after the students transferred and was replaced for both groups by faculty providing pertinent

job-related information. This variable was more significant for the CSU transfers than it was for the UC transfers. Both CSU and UC responders rated the same variables within a close percentile range.

The t test results for these variables showed that although the following variables were very significant to both males and females at MSAC and CSU, they were more significant to females: clear deadlines for class assignments, faculty giving me a class syllabus, faculty who renewed my confidence and self-esteem, a helpful library staff, and using the library to complete assignments. A helpful library staff and using the library to complete assignments though very significant to both White and non-White students, was more significant to non-White students. At MSAC, faculty knowledge of the subject was more significant to students whose home language was English.

The Four Highest Rated Learning Assistance Variables

The CSU transfers gave the same highest ratings to four learning assistance variables at MSAC and at the California State University after they transferred. The variables were: mathematics classes, writing classes, the learning assistance laboratory, and tutorial services. At MSAC, the UC transfers rated writing classes first, mathematics classes second, reading classes third, and tutorial services fourth. After they transferred to the University of California the rating changed to writing classes first,

mathematics classes second, tutorial services third, and reading classes fourth.

The t test results for these variables were at a significance level of .000 at MSAC for CSU students whose home language was not English. After these students transferred to the California State University, the variables were significant at the .000 to .001 level. The variables were at a significance level of .000 to .003 for non-White UC students both at Mt. San Antonio College and after they transferred to the University of California.

The Six Highest Rated Student Services and Campus Programs That Assisted Transfers in Reaching Their Academic Goals

Both the CSU and the UC students rated the transfer center as the number one student service at Mt. San Antonio College. The next highest rated five for the CSU transfers were: exhibitions on campus, lectures on campus, orientation, volunteer work related to my major, and the health center. The next highest five for the UC transfers were: lectures on campus, campus clubs/organizations, career center, volunteer work related to my major, and exhibitions on campus. The percent of important, very important increased for all of these variables after the students transferred to CSU and UC. Lectures on campus, rated number one by both transfer groups, rose to 41.6 percent at CSU and 62.2 percent at UC. The next three rated highest by both groups were: exhibitions on campus, health center, and volunteer work related to my

major. The fifth and sixth highest rated by UC transfers were: concerts/plays on campus, 42.7 percent and campus clubs and organizations, 40 percent. The fifth and sixth highest rated by the CSU transfers were: orientation, 30.4 percent and concerts/plays on campus, 28.5 percent.

The t tests for student services and campus programs showed exhibitions at MSAC and CSU were more significant to males. Volunteer work related to my major was more significant to females at both MSAC and CSU. The CSU Health Center was more significant for females. The CSU Transfer Center was more significant to non-White students. The following variables were more significant at MSAC and CSU for students whose home language was not English: lectures on campus, exhibitions on campus, transfer center, and volunteer work related to my major. Orientation was more important to non-White students at MSAC.

Conclusions and Recommendations for Future Research

Profile of the New Transfer Student

From this study has emerged a new profile of transfer students that should assist community colleges in evaluating student programs and services. The new profile shows significantly more part-time students who persist to transfer, the majority who work 21 to 30 hours per week, more females, more ethnic groups other than White, and a student age range that extends far beyond the traditional

18 to 20 years. According to the Center for Educational Statistics (CES), the traditional time and age frame for completing a Bachelor's degree has changed nationally. Less than half the students who earned a Bachelor's degree by December 1984 followed the traditional pattern of entering college soon after high school graduation and completing studies for a baccalaureate within four years. The profile of the Mt. San Antonio College transfer student clearly shows the amount of time students prepare to transfer is longer than two years.

The Role of Significant Others for the New Transfer Population

This research supports the findings of Neumann (1985), Polland (1983), and Tinto (1987) that the most important variables outside of self-motivation for maintaining student persistence are related to human interaction. The high degree of significance the CSU and UC respondents gave to parents, friends, faculty, and librarians is clear evidence that variables related to human interaction are the key to student success. Tinto (1987) pointed to "weak social systems in non-residential colleges which work against efforts to fully integrate students into the life of the institution" (1987, p. 108). Tinto presented the idea that the variables influencing institutional socialization and student success in two year non-residential colleges are different from those in four year colleges and universities. The findings of this

research do not support Tinto's analysis. Self-motivation and human interaction are just as necessary at a residential or a non-residential college.

The high ratings given by the respondents to their mothers and fathers also confirms earlier research by Cope and Hannah (1975), Pascarella and Terenzine (1978), and Tinto (1975) showing parental encouragement as a most important variable leading to student success. In Polland's 1983 study, 79 percent of the special admits to California State University, Northridge, identified support from parents and spouse as the reason for their academic success. Neumann (1985), in his study of community college students who completed their course of study and those who did not, found the major difference between the persisters and the non-persisters was the persisters had a higher grade point average and were more integrated into the social system of the college. According to Neumann, the persisters joined informal academic peer support groups or clubs, had an informal personal relationship with one or more community college faculty, and had on-campus work study jobs.

At the end of the survey, the respondents were asked to please take the time to share any feelings they wished to about the role MSAC played in helping them reach their academic goals. Three hundred sixty-one (76 percent) of the CSU transfers and 76 (67 percent) of the UC transfers responded to this question. Many wrote lengthy responses

mentioning specific faculty and other staff who had assisted them when they were at Mt. San Antonio College. All the responses were put into a computer file. From the data the researcher developed 11 response categories. All the responses were read by three outside evaluators and placed in the categories. Both CSU and UC responders rated the high quality, accessibility, and helpfulness of faculty and staff number one and Mt. San Antonio College as being a vital link for them to higher education as number two.

Academic Teaming

Outside of their parents, the variables identified by the transfers that assisted them most in achieving their academic goals at MSAC and the universities were related to types of academic interaction with faculty, librarians, and friends. Most significant to them were friends they studied with, friends who had the same major, clear deadlines for class assignments, a friendly library staff, faculty giving them a class syllabus. These students found "significant others" in shared academic interests and goals. To be a part of the institution, they needed to be part of an academic team. They are an illustration of George Herbert Meade's theory of the importance of significant others. Their problem in being integrated into MSAC and the universities after they transferred was not the residential or non-residential nature of the campus, but finding an academic team to play with--someone

who had the same interests, the same major. These students needed others significant to them not by proximity of residence but of interest. Just as football and basketball players need a team to play with, these students needed an academic team. Despite differences in age, sex, and ethnicity, students who share common interests will come together to participate in social academic activities such as lectures, exhibitions, concerts and plays, interdisciplinary seminars, writers' days, and informal discussions with class members and faculty.

Unless these social academic activities exist, institutional efforts to bring about student integration into campus life often fail. No amount of fancy furniture, draperies, or pool tables will attract students to come together who have nothing in common. The "lonely crowd" will surge on past. The research clearly points to the further development of academic teaming as a key to student success.

The Need for a New Method of Evaluating Student Progress Through Higher Education in California

This research clearly points to the need to develop an entirely new method for the three systems of higher education to track student progress. California's present system of tracking student progress through higher education is not adequate. The analysis of the data from the Mt. San Antonio College Transfer Reporting System (MSACTRS) clearly illustrated that the many branching

paths including reverse transfer, concurrent, and summer enrollment students take through higher education have not been traced. The limited view of Fall transfers from university enrollment tapes submitted to the California Post-Secondary Education Commission (CPEC) has not presented the complete picture. The present system does not track the significant movement of students from one institution to another. The figures from the MSACTRS clearly illustrate this point. Only 33 percent of all the former MSAC students who attended the California State University between 1978 and 1987 were credited to Mt. San Antonio College. Only 14.5 percent of all the former MSAC students who attended the University of California between 1982 and 1985 were credited to Mt. San Antonio College. The majority were credited to other community colleges, private and public universities, and high schools.

The other institutions MSAC transfers were credited to illustrates the urgent need for a uniform method to be used by the California Community Colleges and universities to track student movement between their institutions throughout the year including Summer, Fall, Winter, and Spring. The present method does not address reverse transfers, concurrent enrollment, and the growing number of four year college students who spend their summers at California Community Colleges. The idea presented by Kissler in his 1980 planning study that a reverse transfer is one who has completed a four year college and returned

to a community college for leisure or personal pursuits totally ignores the significance of the intra-campus movement of students with or without degrees. According to Kissler (1980), in the Fall of 1979 there were 10,000 students who had attended UC going to California Community Colleges, and 5,000 of these had completed a baccalaureate degree and "were probably taking a community college course to pursue a particular interest" (1980, p. 2). Implicit in Kissler's statement was the idea that community colleges could not offer anyone with a baccalaureate degree any substantive education that was worth the taxpayers' money and that community colleges should concentrate in preparing students to transfer to the state universities. With no data to verify the educational purpose students had at that time in returning to community colleges, Kissler's statement cannot be refuted. However, the growing number of students with Bachelor's degrees or two to three years at a university who return to a community college for retraining, re-licensure, and often entrance into a vocational field cannot be ignored. In a 1980 address to the American Association of Junior and Community Colleges, Clark Kerr predicted by the year 2000 all persons in the work force will need to return to school four times during their lifetime after receiving a Bachelor's degree. According to Kerr, the American Community College was the appropriate educational institution

for this to take place. The growing number of reverse transfers would seem to verify his prediction.

There is a need to recognize the role of the community college as an institution of lifelong learning and recognize the education of reverse transfers with or without Bachelor's degrees as a legitimate community college function. Until this occurs and a cooperative tracking method can be developed between the community colleges and the state universities to follow students as long as they remain in the system, present efforts to determine valid transfer rates are futile.

APPENDIX A

KNOELL AND MEDSKER MEAN GPA MALE AND FEMALE IN JUNIOR COLLEGE AND AFTER TRANSFER SUMMARY OF SIGNIFICANCE LEVELS T-TESTS OF SEX DIFFERENCES IN MEANS

KNOELL AND MEDSKER MEAN GPA MALE AND FEMALE
IN JUNIOR COLLEGE AND AFTER TRANSFER
SUMMARY OF SIGNIFICANCE LEVELS
T-TESTS OF SEX DIFFERENCES IN MEANS

Four Year Colleges	Junior College GPA Men	Women	P	Four Year College GPA Men	Women	P
Type I						
U. Illinois	2.65	3.05	.001	2.05	2.57	.001
U. Kansas	2.59	2.82	.025	1.94	2.22	.01
U. Michigan (Ann Arbor)	2.85	3.05	.001	2.35	2.51	.05
TOTAL (all 10 schools in sample)	2.74	2.93	.001	2.27	2.37	.001
Type 2						
Kansas: Pittsburg	2.45	2.93	.001	2.29	2.63	.01
Emporia	2.49	2.85	.01	2.39	2.69	.01
Western Mich.	2.31	2.58	.001	2.37	2.62	.01
Western Wash. State	2.47	2.72	.01	2.43	2.59	.05
TOTAL (all 9 schools in sample)	2.41	2.71	.001	2.36	2.56	.001
Type 3						
Long Beach State	2.41	2.66	.001	2.31	2.47	.01
San Francisco State	2.45	2.68	.001	2.15	2.46	.001
Florida						

APPENDIX B

LETTER FROM JAIME SALAZAR
TRANSFER CENTER DIRECTOR
SOUTH WESTERN COMMUNITY COLLEGE

TRANSFER CENTER

March 10, 1987

Dear Dr. Knoell:

It has been over seven months since we talked about the inaccuracy of the CPEC Fall 1985 report as it pertains to Southwestern College. As I mentioned to you, the Transfer Report from San Diego State University alone indicated that Southwestern College had more transfer than CPEC reported as a total for all California State Universities.

Due to this discrepancy, I proceeded to request direct information from the public universities. Admittedly, I was more optimistic than the results I received from the Admissions and Relations with School Offices. I sent a letter to all CSU and UC campuses and only eight CSU's and two UC's responded (see attached). However, the limited response still substantiates that Southwestern's transfer rate was higher than reported by CPEC for Fall 1985.

Southwestern has a long-standing commitment to promoting transfer as reflected in the college's establishment of a Transfer Center prior to the availability of funding. We are proud of our efforts and find that accurate data is extremely important in measuring the impact of formalized transfer activities on our student transfer rate.

During our last conversation, you indicated that an addendum to the CPEC Fall 1985 report would be generated from your office, if I sent you revised and more accurate data. I have enclosed university reports reflecting an increase of 65 students taking into account that less than half of the universities responded to the data request. Furthermore, I would suggest that CPEC develop communication with the Independent Colleges and Universities in California to gather data on our transfer students. A significant number of our students are now transferring to the private sector universities.

I look forward to receiving the revised report and request that it be distributed in the same manner as the original report.

Sincerely,

Jaime C. Salazar

Jaime Salazar
Transfer Center Director

NH:bf
F03460

cc.: Inter ACT
Transfer Center Directors
Ron Dyste
Joseph Conte

900 OTAY LAKES ROAD CHULA VISTA, CA 92010 PHONE # 421 6700 EXT. 378

APPENDIX C

STUDY SURVEY

Questionnaire for CSU Transfer students:

Please fill the [] or blanks in for each question. Use pencil and completely erase any answer you want to change.

Name _____ Birth date _____
last/maiden first middle mo/date/yr

1. Your sex: male [] female []

2. Name of high school you attended: Year Graduated _____
_____ _____ _____ _____
school name city state country

3. What was your academic goal when you entered Mt. San Antonio College:

Bachelor degree or higher [] Associate and Bachelor degree []
A.A./A.S. degree [] Certificate [] Job Skill [] Undecided []

4. Please indicate the CSU campuses you attended: _____

5. Please indicate each degree and certificate you have received:

	MAJOR	EDUC. INST.	YEAR
Certificate			
A.A. Degree			
A.S. Degree			
B.A. Degree			
B.S. Degree			
Masters Degree			
PhD			

6. Please indicate your current occupation: _____

7. Were you employed when you attended MSAC: Yes [] No []
CSU: Yes [] No []

8. If you were employed, please indicate the number of hours you worked per week:

	MSAC	CSU
15 or less	[]	[]
16 to 20	[]	[]
21 to 30	[]	[]
Over 30 hours	[]	[]

9. Please indicate your main source of income while going to college: (Check as many as apply.)

	MSAC	CSU
College Financial Aid	[]	[]
College Scholarship	[]	[]
College Work Study	[]	[]
Family Support	[]	[]
Family Support/Own Income	[]	[]
Own Income	[]	[]

10. Did you attend bilingual classes in:

Elementary school	Yes []	No []
Junior High School	Yes []	No []
High School	Yes []	No []

11. Please list the languages spoken in your home when you were a child: (List as many as apply.)

_____
_____
_____
_____
_____

12. Your parents highest level of formal education was:

	Father	Mother
Elementary School or Less	[]	[]
Some High School	[]	[]
High School Graduate	[]	[]
Some College	[]	[]
College Graduate	[]	[]
Unknown	[]	[]

13. Please indicate how often you went to a library as a child:

Often [] Occasionally [] Never []

14. Did your parents receive a daily newspaper: yes [] No []

15. Please indicate how often someone read to you when you were a child:

Often [] Occasionally [] Never []

16. The following people read to me when I was a child: (Check as many as apply.)

Father/Stepfather [] Mother/Stepmother [] Brother [] Sister []
Grandmother [] Grandfather [] Other Relative [] Teacher []
Other Person []

17. Did the schools you attended have libraries?

Elementary school	Yes []	No []
Junior High School	Yes []	No []
High School	Yes []	No []

18. Before you attended school do you remember watching television:

Daily [] Occasionally [] Never []

19. Please indicate to what degree you believe books were important to you when you were growing up. Circle the number by the category of importance.

Very important—4 Important—3 Not too important—2 Unimportant—1

PLEASE ANSWER ALL OF THE FOLLOWING QUESTIONS REGARDING YOUR EXPERIENCE AT MSAC AND CSU.

20. Please answer the following questions as to what degree the persons or programs listed below were important in helping you to reach your academic goals at MSAC and CSU. Circle the number by each statement that corresponds to the category of importance below.

Very Important	Important	Not Too Important	Unimportant
4	3	2	1

	MSAC	CSU Campus Attended
MSAC Counselor	4 - 3 - 2 - 1	
CSU Faculty Advisor		4 - 3 - 2 - 1
Faculty Member	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Career Center	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Child Care Center	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Educational Advisor	4 - 3 - 2 - 1	4 - 3 - 2 - 1
MSAC EOPS	4 - 3 - 2 - 1	
CSU EOP		4 - 3 - 2 - 1
Guidance Class	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Orientation	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Handicapped Student Services	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Health Center	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Transfer Center	4 - 3 - 2 - 1	4 - 3 - 2 - 1
High School Counselor	4 - 3 - 2 - 1	4 - 3 - 2 - 1
High School Instructor	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Father/Stepfather	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Mother/Stepmother	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Brother/Sister	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Other Relative	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Spouse	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Friend	4 - 3 - 2 - 1	4 - 3 - 2 - 1

Others (Please list below.)

_____

_____

21. Please answer the following questions as to what degree the faculty or instructional programs listed below were important in helping you to reach your academic goals at MSAC or CSU. Circle the number by each statement that corresponds to the category of importance below.

Very Important	Important	Not Too Important	Unimportant
4	3	2	1

	MSAC	CSU Campus Attended
Faculty providing advice and helping me develop my educational goals.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Faculty knowledge of subject.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Faculty who were well organized.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Faculty who were concerned and responsive to student needs.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Faculty providing pertinent job-related information.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Faculty providing contacts with career professionals in my field.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Faculty who renewed my confidence and self-esteem.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Being able to repeat a course.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Being able to drop a course.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Internship/work experience related to my major.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Faculty giving me a class Syllabus.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Clear deadlines for class assignments.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
CSU overseas study programs.		4 - 3 - 2 - 1
Research opportunity--off campus study.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Other (Please list below.)		

_____

_____

22. Please answer the following questions as to what degree the library staff or programs listed below were important in helping you to reach your academic goals at MSAC and CSU. Circle the number by each statement that corresponds to the category of importance below.

Very Important	Important	Not Too Important	Unimportant
4	3	2	1

	MSAC	CSU Campus Attended
Using the library to help me complete class assignments.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Using the library for information on different occupations and how to qualify for them.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Orientation classes on how to use the library to do college work.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
A helpful library staff.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Others (Please list below.)		

_____

_____

23. Please answer the following questions as to what degree the instructional programs listed below were important in helping you to reach your academic goals at MSAC and CSU. Circle the number by each statement that corresponds to the category of importance below.

Very Important	Important	Not Too Important	Unimportant
4	3	2	1

	MSAC	CSU Campus Attended
Learning Assistance Classes		
Reading	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Writing	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Mathematics	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Tutorial Services	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Learning Assistance Labs	4 - 3 - 2 - 1	4 - 3 - 2 - 1
American Language Classes (AMLA)	4 - 3 - 2 - 1	
English as a Second Language (ESL)	4 - 3 - 2 - 1	4 - 3 - 2 - 1

24. Please answer the following questions as to what degree the persons or campus programs listed below were important in helping you to reach your academic goals at MSAC and CSU. Circle the number by each statement that corresponds to the category of importance below.

Very Important	Important	Not Too Important	Unimportant
4	3	2	1

	MSAC	CSU Campus Attended
Campus clubs/organizations	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Leadership roles I had in campus activities.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Leadership roles I had in Student Government.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
My participation in inter-collegiate sports.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Lectures on campus.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Concerts/plays on campus.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Exhibitions on campus.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Friends I met.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Friends I studied with.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Friends who had the same major.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Friends off campus.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
My religious affiliation.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
People I admired and wanted to be like.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
My self motivation.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Volunteer work related to my major.	4 - 3 - 2 - 1	4 - 3 - 2 - 1
Others (Please list below)		

Please take the time to share any feelings you wish to about the role MSAC played in helping you reach your academic goals.

Thank you for your participation in this survey. Please return it in the enclosed stamped envelope provided.

Your individual responses will be held in complete confidence.

APPENDIX D

STUDY COVER LETTER

MT. SAN ANTONIO
COMMUNITY COLLEGE DISTRICT
1100 NORTH GRAND AVENUE • WALNUT, CALIFORNIA 91789
(714) 594-5611

October, 1987

Letter to be sent on college letterhead to research population with the questionnaire and a return envelope. The letter will be individualized for the CSU and UC transfers.

Dear MSAC Graduate:

I am coming to you because you successfully transferred from Mt. San Antonio College to the California State University. We hope you will take the time to share with us, on the enclosed questionnaire, your perceptions of the individuals and programs that were most important in helping you set and achieve your academic goals.

Mt. San Antonio College is committed to the success of our transfer students. By studying your responses, we hope to learn how we can improve programs and services for our future students.

Regardless of how you feel about Mt. San Antonio College, we need to hear from you. Your individual responses will be held in complete confidence. Please take the time to share your valuable experiences to assist future MSAC students.

I thank you for your help.

Sincerely,

Joseph M. Zagorski
Acting Superintendent/President

vrd

Enclosure

BOARD OF TRUSTEES: HOWARD H. HAWKINS, President; DR. GERALD J. ZUNINO, Vice-President; KENNETH L. HUNT, Secretary
BARBARA BOOTH, Member; GARY V. MILLER, Member
DR. JOHN D. RANDALL, District Superintendent and President

APPENDIX E

CSU TRANSFER GENDER AND ETHNIC DISTRIBUTION SUMMER 1978 THROUGH SPRING 1987

Mount San Antonio College
Computer Services
CSU Transfer Sex and Ethnic Distribution Percentages

Sample: All students

MSAC: Summer 78 thru Spring 87
CSU: Summer 78 thru Spring 87

Institution of Origin	Total	(F) Fem	(M) Male	(1) Indn	(2) Black	(3) Chicn	(4) Hispn	(5) Asian	(6) Pacif	(7) White	(8) Other	(9) Nresp	(D) Decln	(F) Filip
MOUNT SAN ANTONIO COLLEGE	7289	49.7	50.3	1.0	5.3	10.8	4.0	6.8	0.4	56.3	2.0	6.8	4.6	2.0
CALIF STATE POLY UNIV AT POMONA	609	49.3	50.7	0.5	3.6	6.7	1.5	5.9	0.3	59.6	1.8	14.3	4.9	0.8
CITRUS COLLEGE	536	50.0	50.0	1.9	4.9	6.3	3.4	6.0	0.2	59.7	1.7	10.4	5.0	0.6
CALIF STATE UNIV AT LOS ANGELES	503	53.1	46.9	1.0	7.2	14.1	4.2	5.4	0.4	43.7	1.4	13.9	8.3	0.4
CHAFFEY COLLEGE	495	51.1	48.9	1.4	4.8	10.1	3.8	5.5	0.4	59.8	1.6	7.5	4.2	0.8
CALIFORNIA STATE COLLEGE AT FULLERT	449	55.9	44.1	0.9	3.1	10.2	2.7	4.0	0.2	60.6	0.7	11.8	5.3	0.4
RIO HONDO COLLEGE	299	48.2	51.8	1.7	1.0	26.8	4.0	7.0	0.7	40.5	2.0	10.7	5.0	0.7
EAST LOS ANGELES COLLEGE	250	41.2	58.8	1.2	5.2	34.0	4.0	14.8	0.4	18.4	2.4	10.8	8.0	0.8
PASADENA CITY COLLEGE	235	49.8	50.2	0.9	3.4	6.8	4.3	9.8	0.0	54.9	2.6	8.9	7.2	1.3
WILSON-GLEN A-HIGH SCHOOL	235	51.1	48.9	0.4	1.3	6.4	5.5	33.6	0.4	43.0	1.7	3.8	3.0	0.9
FULLERTON JUNIOR COLLEGE	228	49.6	50.4	0.9	0.0	6.6	2.6	8.8	0.4	66.7	2.6	7.9	3.1	0.4
WALNUT HIGH SCHOOL	222	62.6	37.4	1.4	5.9	5.9	4.1	8.6	1.4	58.6	1.8	6.3	3.2	3.2
LOS ALTOS HIGH SCHOOL	205	57.1	42.9	1.0	1.0	9.3	3.4	10.7	0.0	63.4	2.9	5.4	2.9	0.0
CALIF STATE UNIV AT LONG BEACH	204	57.8	42.2	1.0	5.9	7.8	2.5	4.9	2.0	58.3	1.0	10.3	5.9	0.5
UNIVERSITY OF CALIFORNIA LOS ANGELE	203	55.7	44.3	0.5	7.9	9.4	2.0	15.8	0.5	40.4	3.0	10.8	7.4	2.5
WEST COVINA HIGH SCHOOL	202	47.5	52.5	2.5	5.9	6.9	2.0	7.4	0.5	59.9	3.5	8.9	2.0	0.5
ROWLAND-JOHN A-HIGH SCHOOL	192	50.5	49.5	0.5	1.0	10.4	7.3	18.8	1.6	49.5	1.0	5.7	3.1	1.0
BISHOP AMAT MEMORIAL HIGH SCHOOL	187	65.2	34.8	0.0	1.1	18.7	6.4	2.7	0.5	52.9	2.1	7.0	3.2	5.3
POMONA SENIOR HIGH SCHOOL	173	63.0	37.0	1.2	35.3	8.1	1.2	8.1	0.0	34.7	1.2	9.8	0.6	0.0
LA VERNE COLLEGE	171	60.2	39.8	1.2	9.4	10.5	7.6	1.8	0.0	50.3	3.5	11.1	4.1	0.6
SOUTH HILLS HIGH SCHOOL	153	51.6	48.4	1.3	0.0	3.9	2.6	9.2	0.0	74.5	0.7	3.3	4.6	0.0
NOGALES HIGH SCHOOL	142	52.8	47.2	2.1	7.0	23.9	7.0	13.4	1.4	23.2	0.7	2.1	4.2	14.8
CLAREMONT HIGH SCHOOL	139	59.0	41.0	2.9	6.5	1.4	3.6	5.8	0.0	64.0	2.9	8.6	3.6	0.7
EDGEWOOD HIGH SCHOOL	127	60.6	39.4	0.8	3.9	15.0	7.1	14.2	0.8	48.0	1.6	3.1	3.9	1.6
LA PUENTE HIGH SCHOOL	127	65.4	34.6	1.6	8.7	37.0	8.7	13.4	0.0	17.3	2.4	6.3	3.1	1.6
LOS ANGELES CITY COLLEGE	127	48.8	51.2	0.8	22.8	9.4	6.3	20.5	0.0	9.4	0.8	10.2	8.7	11.0
GANESHA SENIOR HIGH SCHOOL	126	54.0	46.0	0.0	23.8	9.5	3.2	5.6	0.0	46.8	0.0	8.7	0.8	1.6
UNIVERSITY OF CALIFORNIA IRVINE	118	58.5	41.5	0.0	6.8	3.4	5.9	21.2	0.8	50.8	0.0	5.1	3.4	2.5
ROYAL OAK HIGH SCHOOL	117	58.1	41.9	2.6	0.9	0.9	3.4	6.8	0.0	76.1	1.7	4.3	3.4	0.0
BONITA HIGH SCHOOL	116	51.7	48.3	3.4	1.7	5.2	2.6	9.5	0.0	66.4	1.7	5.2	1.7	2.6
COVINA HIGH SCHOOL	115	55.7	44.3	0.0	1.7	7.0	0.9	5.2	0.0	72.2	0.9	10.4	0.9	0.9
ORANGE COAST COLLEGE	115	41.7	58.3	1.7	2.6	0.9	1.7	11.3	0.0	71.3	0.0	7.0	2.6	0.9
UNIVERSITY OF SOUTHERN CALIFORNIA	114	51.8	48.2	0.9	5.3	11.4	5.3	11.4	0.0	53.5	0.9	8.8	0.9	1.8
SAN DIMAS HIGH SCHOOL	112	63.4	36.6	1.8	8.0	7.1	1.8	10.7	0.0	55.4	0.0	7.1	3.6	4.5
CERRITOS COLLEGE	111	50.5	49.5	2.7	7.2	9.9	2.7	8.1	0.0	51.4	2.7	9.0	4.5	1.8
GAREY SENIOR HIGH SCHOOL	104	60.6	39.4	1.0	26.0	24.0	3.8	17.3	0.0	10.6	1.0	13.5	2.9	0.0
CALIF STATE UNIV AT SAN DIEGO	102	54.9	45.1	3.9	6.9	9.8	1.0	2.0	0.0	65.7	1.0	5.9	2.9	1.0
AZUSA PACIFIC COLLEGE/AZUSA COLLEGE	96	59.4	40.6	1.0	4.2	2.1	4.2	0.0	1.0	60.4	2.1	14.6	9.4	1.0
UPLAND HIGH SCHOOL	87	59.8	40.2	2.3	6.9	2.3	0.0	9.2	0.0	65.5	1.1	9.2	3.4	0.0
SAN BERNARDINO VALLEY	86	43.0	57.0	0.0	15.1	16.3	3.5	4.7	0.0	47.7	2.3	8.1	2.3	0.0
CHARTER OAK HIGH SCHOOL	85	49.4	50.6	0.0	2.4	3.5	3.5	9.4	0.0	65.9	3.5	7.1	3.5	1.2
TEXAS	82	48.8	51.2	2.4	0.0	0.0	1.2	1.2	1.2	79.3	2.4	7.3	4.9	0.0
BALDWIN PARK HIGH SCHOOL	80	62.5	37.5	1.3	1.3	25.0	5.0	15.0	0.0	30.0	6.3	6.3	1.3	8.8
DAMIEN HIGH-CATH/POMONA CATHOLIC BO	80	0.0	100.0	3.8	0.0	18.8	7.5	5.0	0.0	53.8	2.5	5.0	3.8	0.0
NEW MEXICO	80	53.8	46.3	1.3	13.8	1.3	11.3	3.8	1.3	42.5	1.3	12.5	10.0	1.3
UNIVERSITY OF CALIFORNIA RIVERSIDE	80	60.0	40.0	0.0	1.3	7.5	6.3	3.8	0.0	58.8	6.3	8.8	7.5	0.0

Mount San Antonio College
Computer Services

Sample: All students — CSU Transfer Sex and Ethnic Distribution Percentages — MSAC: Summer 78 thru Spring 87 — CSU: Summer 78 thru Spring 87

Institution of Origin	Total	(F) Fem	(M) Male	(1) Indn	(2) Black	(3) Chicn	(4) Hispn	(5) Asian	(6) Pacif	(7) White	(8) Other	(9) Nresp	(D) Decln	(F) Filip
RIVERSIDE CITY COLLEGE	77	50.6	49.4	0.0	6.5	13.0	5.2	5.2	0.0	55.8	1.3	6.5	6.5	0.0
UNIVERSITY OF CALIF SANTA BARBARA	75	56.0	44.0	2.7	2.7	5.3	1.3	9.3	0.0	58.7	4.0	5.3	8.0	2.7
EL CAMINO COLLEGE	72	54.2	45.8	1.4	23.6	6.9	2.8	5.6	1.4	41.7	1.4	9.7	4.2	1.4
CALIF STATE UNIV AT NORTHRIDGE	71	60.6	39.4	2.8	5.6	9.9	2.8	5.6	0.0	59.2	1.4	4.2	8.5	0.0
BASSETT HIGH SCHOOL	70	61.4	38.6	1.4	5.7	47.1	5.7	7.1	0.0	18.6	0.0	5.7	2.9	5.7
NORTHVIEW HIGH SCHOOL	70	57.1	42.9	2.9	4.3	2.9	4.3	8.6	0.0	65.7	1.4	7.1	1.4	1.4
WORKMAN-WILLIAM A-HIGH SCHOOL	70	54.3	45.7	1.4	10.0	14.3	4.3	5.7	0.0	45.7	1.4	10.0	1.4	5.7
CHAFFEY HIGH SCHOOL	69	53.6	46.4	0.0	4.3	10.1	4.3	5.8	0.0	66.7	0.0	5.8	2.9	0.0
ARIZONA	66	47.0	53.0	3.0	6.1	6.1	1.5	4.5	0.0	53.0	1.5	19.7	4.5	0.0
IDAHO	64	59.4	40.6	0.0	4.7	1.6	1.6	7.8	0.0	67.2	1.6	9.4	6.3	0.0
LONG BEACH CITY COLLEGE	64	43.8	56.3	1.6	7.8	6.3	7.8	3.1	0.0	57.8	0.0	12.5	3.1	0.0
CYPRESS COLLEGE	62	58.1	41.9	3.2	1.6	4.8	6.5	6.5	0.0	61.3	3.2	8.1	4.8	0.0
SAINT LUCYS PRIORY HIGH SCHOOL	58	96.6	3.4	5.2	0.0	10.3	8.6	3.4	0.0	65.5	1.7	5.2	0.0	0.0
SANTA ANA COLLEGE	58	48.3	51.7	1.7	3.4	8.6	3.4	17.2	0.0	43.1	1.7	6.9	12.1	1.7
LOS ANGELES PIERCE COLLEGE	57	38.6	61.4	0.0	0.0	5.3	5.3	8.8	0.0	61.4	0.0	14.0	3.5	1.8
POMONA CATHOLIC GIRLS HIGH SCHOOL	57	100.0	0.0	1.8	1.8	24.6	7.0	5.3	0.0	49.1	5.3	3.5	1.8	0.0
SADDLEBACK COLLEGE	55	40.0	60.0	1.8	3.6	5.5	3.6	12.7	1.8	60.0	7.3	1.8	1.8	0.0
CHINO SENIOR HIGH SCHOOL	54	63.0	37.0	1.9	0.0	13.0	0.0	20.4	0.0	50.0	1.9	11.1	1.9	0.0
GLENDORA HIGH SCHOOL	54	57.4	42.6	1.9	0.0	0.0	1.9	5.6	0.0	81.5	3.7	5.6	0.0	0.0
GOLDEN WEST COLLEGE	54	55.6	44.4	0.0	0.0	5.6	1.9	13.0	0.0	72.2	1.9	3.7	1.9	0.0
CHINA REPUBLIC OF-FORMOSA TAIWAN	53	45.3	54.7	0.0	0.0	1.9	0.0	83.0	1.9	0.0	0.0	5.7	7.5	0.0
DIAMOND BAR HIGH SCHOOL	53	62.3	37.7	1.9	1.9	3.8	0.0	20.8	1.9	62.3	3.8	0.0	0.0	3.8
MONTCLAIR HIGH SCHOOL	53	50.9	49.1	1.9	5.7	5.7	7.5	17.0	1.9	45.3	1.9	11.3	1.9	0.0
INSTITUTION UNKNOWN	52	53.8	46.2	5.8	7.7	0.0	1.9	5.8	0.0	30.8	0.0	44.2	3.8	0.0
SAN DIEGO MESA COLLEGE	52	42.3	57.7	1.9	9.6	5.8	0.0	5.8	1.9	59.6	0.0	9.6	3.8	1.9
SIERRA VISTA JUNIOR-SENIOR HIGH SCH	52	63.5	36.5	3.8	1.9	38.5	17.3	9.6	0.0	7.7	3.8	5.8	3.8	7.7
LOS ANGELES TRADE TECHNICAL COLLEGE	51	31.4	68.6	2.0	31.4	13.7	5.9	2.0	0.0	15.7	0.0	23.5	5.9	0.0
MASSACHUSETTS	48	54.2	45.8	2.1	2.1	4.2	0.0	10.4	0.0	64.6	2.1	14.6	0.0	0.0
TENNESSEE	47	44.7	55.3	0.0	8.5	8.5	2.1	14.9	0.0	44.7	0.0	19.1	2.1	0.0
CALIF STATE POLY UNIV AT SAN LUIS O	46	58.7	41.3	0.0	0.0	6.5	0.0	4.3	0.0	71.7	0.0	6.5	8.7	2.2
IMPERIAL VALLEY COLLEGE	45	37.8	62.2	2.2	4.4	55.6	2.2	0.0	0.0	13.3	2.2	13.3	6.7	0.0
PHILIPPINES	44	59.1	40.9	0.0	0.0	0.0	0.0	9.1	0.0	2.3	0.0	20.5	4.5	63.6
DON ANTONIO LUGO "IGH	43	53.5	46.5	0.0	0.0	7.0	2.3	7.0	2.3	74.4	2.3	0.0	0.0	4.7
DON BOSCO TECHNICAL INSTITUTE	43	0.0	100.0	2.3	0.0	37.2	4.7	2.3	0.0	41.9	0.0	0.0	7.0	4.7
UNIVERSITY OF CALIFORNIA BERKELEY	42	35.7	64.3	0.0	2.4	9.5	0.0	28.6	0.0	45.2	2.4	4.8	4.8	2.4
CALIFORNIA	41	36.6	63.4	0.0	2.4	9.8	4.9	2.4	0.0	61.0	0.0	14.6	2.4	2.4
OREGON	41	58.5	41.5	2.4	4.9	2.4	2.4	4.9	0.0	68.3	0.0	12.2	0.0	2.4
WHITTIER COLLEGE	40	57.5	42.5	0.0	7.5	12.5	0.0	10.0	0.0	50.0	0.0	17.5	2.5	0.0
VIRGINIA	39	53.8	46.2	0.0	2.6	2.6	2.6	7.7	0.0	59.0	5.1	12.8	5.1	2.6
CALIF STATE COLLEGE AT DOMINGUEZ HI	38	57.9	42.1	0.0	18.4	7.9	2.6	5.3	0.0	42.1	0.0	13.2	7.9	2.6
EL MONTE HIGH SCHOOL	38	76.3	23.7	0.0	0.0	23.7	10.5	28.9	0.0	18.4	0.0	13.2	5.3	0.0
UNIVERSITY OF CALIFORNIA SAN DIEGO	38	42.1	57.9	0.0	5.3	5.3	0.0	7.9	0.0	50.0	7.9	18.4	0.0	5.3
LOMA LINDA UNIVERSITY	37	54.1	45.9	0.0	5.4	5.4	5.4	13.5	0.0	43.2	5.4	16.2	2.7	2.7
SANTA MONICA CITY COLLEGE	36	38.9	61.1	0.0	5.6	5.6	5.6	13.9	0.0	47.2	5.6	5.6	8.3	2.8
CROSSMONT COLLEGE	35	54.3	45.7	2.9	2.9	8.6	0.0	0.0	0.0	77.1	2.9	5.7	0.0	0.0
ILLINOIS	35	54.3	45.7	0.0	11.4	0.0	0.0	2.9	0.0	65.7	5.7	11.4	2.9	0.0

Mount San Antonio College
Computer Services

Sample: All students — CSU Transfer Sex and Ethnic Distribution Percentages — MSAC: Summer 78 thru Spring 87 — CSU: Summer 78 thru Spring 87

Institution of Origin	Total	(F) Fem	(M) Male	(1) Indn	(2) Black	(3) Chicn	(4) Hispn	(5) Asian	(6) Pacif	(7) White	(8) Othe	(9) Mresp	(D) Decln	(F) Filip
LOYOLA MARYMOUNT UNIV/LOYOLA UNIV O	35	54.3	45.7	0.0	5.7	14.3	2.9	2.9	0.0	48.6	0.0	14.3	11.4	0.0
PITZER COLLEGE	35	65.7	34.3	0.0	11.4	22.9	0.0	2.9	2.9	48.6	0.0	11.4	0.0	0.0
UNIVERSITY OF REDLANDS	35	60.0	40.0	2.9	8.6	14.3	0.0	0.0	0.0	54.3	0.0	14.3	5.7	0.0
GLENDALE COLLEGE	34	52.9	47.1	2.9	0.0	8.8	2.9	14.7	0.0	47.1	5.9	17.6	0.0	0.0
LOS ANGELES HARBOR COLLEGE	34	41.2	58.8	0.0	11.8	17.6	2.9	8.8	0.0	29.4	2.9	20.6	0.0	5.9
ALTA LOMA HIGH SCHOOL	33	51.5	48.5	0.0	0.0	9.1	3.0	6.1	0.0	66.7	0.0	15.2	0.0	0.0
CALIF STATE UNIV AT CHICO	33	39.4	60.6	0.0	0.0	9.1	0.0	0.0	0.0	69.7	0.0	15.2	6.1	0.0
CALIF STATE UNIV AT FRESNO	33	69.7	30.3	3.0	18.2	6.1	3.0	9.1	3.0	33.3	0.0	21.2	3.0	0.0
OKLAHOMA	33	57.6	42.4	3.0	9.1	3.0	3.0	6.1	0.0	57.6	3.0	12.1	3.0	0.0
CALIF STATE COLLEGE AT SAN BERNARDI	32	78.1	21.9	6.3	15.6	6.3	3.1	3.1	3.1	34.4	3.1	9.4	15.6	0.0
CHAPMAN COLLEGE	32	59.4	40.6	0.0	3.1	9.4	6.3	3.1	0.0	68.8	3.1	0.0	3.1	3.1
CALIF STATE UNIV AT SAN JOSE	31	45.2	54.8	0.0	12.9	0.0	9.7	9.7	0.0	48.4	0.0	12.9	6.5	0.0
PALOMAR COLLEGE	30	53.3	46.7	3.3	0.0	16.7	6.7	3.3	0.0	50.0	3.3	6.7	10.0	0.0
MARYLAND	29	62.1	37.9	3.4	3.4	0.0	3.4	10.3	0.0	62.1	0.0	13.8	3.4	0.0
ALHAMBRA HIGH SCHOOL	28	46.4	53.6	0.0	0.0	0.0	7.1	39.3	0.0	35.7	0.0	7.1	10.7	0.0
BIOLA COLLEGE	28	53.6	46.4	0.0	3.6	7.1	3.6	3.6	0.0	60.7	10.7	3.6	7.1	0.0
CALIF STATE UNIV AT HUMBOLDT	28	35.7	64.3	3.6	0.0	17.9	3.6	0.0	0.0	60.7	0.0	14.3	0.0	0.0
CITY COLLEGE OF SAN FRANCISCO	28	32.1	67.9	0.0	10.7	3.6	0.0	46.4	3.6	32.1	0.0	0.0	0.0	3.6
LOS ANGELES VALLEY COLLEGE	28	35.7	64.3	0.0	7.1	0.0	7.1	7.1	0.0	60.7	0.0	14.3	3.6	0.0
UNIVERSITY OF CALIFORNIA DAVIS	28	57.1	42.9	0.0	3.6	10.7	0.0	7.1	0.0	60.0	7.1	10.7	10.7	0.0
VICTOR VALLEY COLLEGE	28	42.9	57.1	0.0	7.1	0.0	0.0	14.3	0.0	60.7	3.6	10.7	3.6	0.0
CALIF STATE UNIV AT SAN FRANCISCO	27	59.3	40.7	0.0	3.7	11.1	3.7	7.4	0.0	51.9	0.0	22.2	0.0	0.0
COLLEGE OF THE DESERT	27	29.6	70.4	0.0	11.1	25.9	0.0	7.4	0.0	48.1	3.7	0.0	3.7	0.0
NORTH DAKOTA	27	70.4	29.6	0.0	11.1	0.0	0.0	7.4	0.0	63.0	0.0	11.1	7.4	0.0
ONTARIO HIGH SCHOOL	26	61.5	38.5	0.0	19.2	7.7	7.7	3.8	0.0	46.2	0.0	15.4	0.0	0.0
INDIA	25	40.0	60.0	0.0	0.0	0.0	0.0	60.0	12.0	8.0	0.0	4.0	12.0	4.0
MAINE	25	48.0	52.0	0.0	16.0	16.0	4.0	8.0	0.0	40.0	0.0	12.0	4.0	0.0
SONORA HIGH SCHOOL	25	44.0	56.0	0.0	0.0	4.0	8.0	4.0	0.0	56.0	8.0	4.0	16.0	0.0
BELMONT SENIOR HIGH SCHOOL	24	45.8	54.2	0.0	8.3	16.7	4.2	33.3	0.0	0.0	4.2	4.2	0.0	29.2
COMPTON COLLEGE	24	54.2	45.8	0.0	62.5	0.0	0.0	0.0	4.2	8.3	0.0	8.3	12.5	4.2
MOUNT SAN JACINTO COLLEGE	24	45.8	54.2	0.0	0.0	4.2	8.3	4.2	0.0	70.8	0.0	8.3	4.2	0.0
ARCADIA HIGH SCHOOL	23	60.9	39.1	0.0	0.0	4.3	4.3	0.0	0.0	82.6	0.0	8.7	0.0	0.0
PEPPERDINE COLLEGE	23	60.9	39.1	0.0	30.4	0.0	8.7	8.7	0.0	43.5	0.0	4.3	4.3	0.0
VIETNAM REPUBLIC OF-SOUTH	23	13.0	87.0	0.0	0.0	0.0	0.0	82.6	0.0	0.0	4.3	8.7	4.3	0.0
WILSON-WOODROW-JUNIOR-SENIOR HIGH S	22	50.0	50.0	0.0	4.5	9.1	4.5	40.9	4.5	27.3	0.0	0.0	4.5	4.5
CALIF STATE UNIV AT SACRAMENTO	21	61.9	38.1	0.0	0.0	0.0	4.8	23.8	0.0	61.9	0.0	0.0	9.5	0.0
CRAFTON HILLS COLLEGE	21	52.4	47.6	4.8	4.8	4.8	0.0	0.0	0.0	76.2	4.8	0.0	4.8	0.0
WEST LOS ANGELES COLLEGE	21	52.4	47.6	0.0	47.6	0.0	0.0	9.5	0.0	19.0	0.0	9.5	9.5	4.8
WEST VIRGINIA	21	33.3	66.7	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	4.8	14.3	9.5
CLAREMONT MC KENNA/CLAREMONT MENS	20	40.0	60.0	0.0	5.0	20.0	0.0	10.0	0.0	60.0	0.0	5.0	0.0	0.0
GEORGIA	20	65.0	35.0	0.0	5.0	0.0	0.0	35.0	5.0	45.0	5.0	5.0	0.0	0.0
GLADSTONE HIGH SCHOOL	20	55.0	45.0	0.0	0.0	30.0	5.0	0.0	0.0	35.0	0.0	10.0	0.0	20.0
MISSISSIPPI	20	45.0	55.0	0.0	0.0	5.0	0.0	10.0	0.0	65.0	5.0	5.0	5.0	5.0
POMONA COLLEGE	20	65.0	35.0	0.0	15.0	20.0	5.0	5.0	0.0	35.0	0.0	15.0	5.0	0.0
ROWLAND ADULT SCHOOL	20	60.0	40.0	0.0	0.0	15.0	0.0	30.0	0.0	45.0	0.0	5.0	0.0	5.0
SANTA BARBARA CITY COLLEGE	20	30.0	70.0	5.0	0.0	5.0	5.0	5.0	0.0	60.0	0.0	15.0	5.0	0.0

Mount San Antonio College
Computer Services

Sample: All students — CSU Transfer Sex and Ethnic Distribution Percentages — MSAC: Summer 78 thru Spring 87 — CSU: Summer 78 thru Spring 87

Institution of Origin	Total	(F) Fem	(M) Male	(1) Indn	(2) Black	(3) Chicn	(4) Hispn	(5) Asian	(6) Pacif	(7) White	(8) Othgr	(9) Nresp	(D) Decln	(F) Filip
SOUTHWESTERN COLLEGE	20	40.0	60.0	5.0	15.0	20.0	0.0	5.0	0.0	25.0	5.0	15.0	5.0	5.0
CUESTA COLLEGE / SAN LUIS OBISPO	19	42.1	57.9	10.5	5.3	10.5	0.0	0.0	0.0	63.2	5.3	5.3	0.0	0.0
DELAWARE	19	47.4	52.6	5.3	0.0	0.0	5.3	10.5	0.0	47.4	5.3	5.3	10.5	10.5
LOS ANGELES SENIOR HIGH SCHOOL	19	47.4	52.6	0.0	42.1	5.3	0.0	42.1	0.0	0.0	0.0	0.0	5.3	5.3
NEW HAMPSHIRE	19	57.9	42.1	0.0	10.5	0.0	0.0	5.3	0.0	63.2	0.0	10.5	5.3	5.3
NEW JERSEY	19	42.1	57.9	10.5	0.0	21.1	5.3	0.0	0.0	31.6	5.3	10.5	15.8	0.0
WHITTIER HIGH SCHOOL	19	73.7	26.3	0.0	0.0	10.5	10.5	21.1	0.0	57.9	0.0	0.0	0.0	0.0
ALABAMA	18	61.1	38.9	0.0	27.8	0.0	5.6	0.0	0.0	33.3	0.0	22.2	11.1	0.0
BAKERSFIELD COLLEGE	18	61.1	38.9	0.0	5.6	16.7	5.6	5.6	0.0	61.1	0.0	0.0	0.0	5.6
CALIFORNIA STATE CLG AT FULLERTON E	18	61.1	38.9	0.0	16.7	22.2	0.0	5.6	0.0	16.7	5.6	27.8	5.6	0.0
KOREA REPUBLIC OF-SOUTH	18	55.6	44.4	0.0	0.0	0.0	0.0	77.8	0.0	0.0	0.0	16.7	5.6	0.0
PACIFIC CHRISTIAN COLLEGE	18	72.2	27.8	0.0	22.2	5.6	0.0	0.0	0.0	61.1	5.6	5.6	0.0	0.0
VENTURA COLLEGE	18	44.4	55.6	5.6	0.0	5.6	11.1	16.7	0.0	33.3	0.0	22.2	0.0	5.6
FRESNO CITY COLLEGE	17	52.9	47.1	0.0	5.9	11.8	5.9	0.0	0.0	58.8	0.0	17.6	0.0	0.0
INDIANA	17	47.1	52.9	0.0	5.9	0.0	0.0	0.0	0.0	94.1	0.0	0.0	0.0	0.0
MOORPARK COLLEGE	17	35.3	64.7	0.0	5.9	5.9	0.0	11.8	0.0	70.6	0.0	5.9	0.0	0.0
SCHURR/GEORGE MILLER-HIGH SCHOOL	17	35.3	64.7	0.0	0.0	29.4	0.0	29.4	0.0	23.5	0.0	5.9	11.8	0.0
HANCOCK-ALLAN-COLLEGE	16	43.8	56.3	0.0	6.3	12.5	0.0	0.0	0.0	62.5	6.3	6.3	0.0	6.3
HAWAII	16	31.3	68.8	0.0	6.3	6.3	0.0	6.3	0.0	56.3	0.0	12.5	12.5	0.0
LOS ANGELES SOUTHWEST COLLEGE	16	62.5	37.5	0.0	62.5	6.3	0.0	0.0	0.0	6.3	0.0	18.8	6.3	0.0
MOUNTAIN VIEW HIGH SCHOOL	16	75.0	25.0	0.0	0.0	56.3	6.3	12.5	0.0	12.5	0.0	6.3	6.3	0.0
OHIO	16	50.0	50.0	6.3	12.5	0.0	0.0	6.3	0.0	50.0	0.0	18.8	6.3	0.0
RAMONA CONVENT HIGH SCHOOL	16	100.0	0.0	0.0	0.0	12.5	25.0	6.3	0.0	25.0	12.5	12.5	6.3	0.0
SANTA ROSA JUNIOR COLLEGE	16	31.3	68.8	6.3	0.0	6.3	0.0	0.0	0.0	68.8	0.0	6.3	12.5	0.0
CAL STATE POMONA EXTN	15	33.3	66.7	6.7	6.7	13.3	0.0	20.0	6.7	33.3	6.7	0.0	6.7	0.0
DIABLO VALLEY COLLEGE	15	73.3	26.7	0.0	6.7	20.0	0.0	0.0	0.0	66.7	0.0	0.0	6.7	0.0
IOWA	15	40.0	60.0	0.0	6.7	0.0	0.0	6.7	0.0	60.0	6.7	13.3	6.7	0.0
LA HABRA HIGH SCHOOL	15	66.7	33.3	0.0	6.7	13.3	0.0	13.3	0.0	53.3	6.7	6.7	0.0	0.0
LA SERNA HIGH SCHOOL	15	53.3	46.7	0.0	0.0	0.0	0.0	13.3	0.0	73.3	0.0	6.7	6.7	0.0
SAN DIEGO CITY COLLEGE	15	33.3	66.7	6.7	20.0	6.7	0.0	0.0	0.0	33.3	0.0	26.7	6.7	0.0
AMERICAN RIVER COLLEGE	14	85.7	14.3	0.0	0.0	0.0	0.0	0.0	0.0	57.1	0.0	21.4	21.4	0.0
BREA-OLINDA UNION HIGH SCHOOL	14	50.0	50.0	0.0	7.1	0.0	0.0	7.1	0.0	78.6	0.0	0.0	7.1	0.0
KEPPEL-MARK-HIGH SCHOOL	14	78.6	21.4	0.0	0.0	21.4	7.1	42.9	0.0	28.6	0.0	0.0	0.0	0.0
MICHIGAN	14	64.3	35.7	0.0	0.0	0.0	0.0	7.1	0.0	78.6	0.0	7.1	7.1	0.0
MONROVIA HIGH SCHOOL	14	50.0	50.0	0.0	7.1	0.0	7.1	14.3	0.0	64.3	0.0	0.0	7.1	0.0
NEBRASKA	14	50.0	50.0	0.0	7.1	0.0	7.1	0.0	0.0	78.6	0.0	7.1	0.0	0.0
ROOSEVELT-THEODORE-SENIOR HIGH SCHO	14	64.3	35.7	0.0	0.0	71.4	0.0	14.3	0.0	0.0	0.0	14.3	0.0	0.0
SACRAMENTO CITY COLLEGE	14	50.0	50.0	0.0	7.1	14.3	7.1	21.4	0.0	28.6	0.0	14.3	0.0	7.1
WOODBURY UNIVERSITY	14	42.9	57.1	0.0	7.1	0.0	0.0	14.3	0.0	35.7	0.0	21.4	21.4	0.0
BARSTOW COLLEGE	13	53.8	46.2	0.0	15.4	15.4	7.7	0.0	7.7	38.5	0.0	7.7	7.7	0.0
CALIFORNIA HIGH SCHOOL	13	53.8	46.2	0.0	0.0	7.7	7.7	7.7	0.0	61.5	0.0	15.4	0.0	0.0
CALIFORNIA STATE COLLEGE AT HAYWARD	13	76.9	23.1	0.0	15.4	15.4	0.0	7.7	0.0	53.8	0.0	0.0	7.7	0.0
SAN GABRIEL HIGH SCHOOL	13	61.5	38.5	0.0	0.0	23.1	15.4	15.4	0.0	30.8	7.7	7.7	0.0	0.0
TEMPLE CITY HIGH SCHOOL	13	53.8	46.2	0.0	0.0	15.4	0.0	15.4	0.0	53.8	7.7	7.7	0.0	0.0
WEST VALLEY COLLEGE	13	38.5	61.5	0.0	0.0	7.7	0.0	7.7	0.0	84.6	0.0	0.0	0.0	0.0
COLLEGE OF SAN MATEO	12	25.0	75.0	0.0	8.3	0.0	8.3	25.0	0.0	33.3	16.7	8.3	0.0	0.0

Mount San Antonio College
Computer Services

Sample: All students — CSU Transfer Sex and Ethnic Distribution Percentages — MSAC: Summer 78 thru Spring 87 — CSU: Summer 78 thru Spring 87

Institution of Origin	Total	(F) Fem	(M) Male	(1) Indn	(2) Black	(3) Chicn	(4) Hispn	(5) Asian	(6) Pacif	(7) White	(8) Othe?	(9) Nresp	(D) Decln	(F) Filip
COLLEGE OF THE CANYONS/AKA SANTA CL	12	41.7	58.3	8.3	0.0	8.3	0.0	8.3	0.0	58.3	0.0	16.7	0.0	0.0
FLORIDA	12	33.3	66.7	0.0	8.3	8.3	0.0	16.7	0.0	41.7	0.0	16.7	8.3	0.0
MISSOURI	12	66.7	33.3	0.0	0.0	0.0	0.0	0.0	0.0	75.0	8.3	16.7	0.0	0.0
NORCO SENIOR HIGH SCHOOL	12	58.3	41.7	0.0	0.0	0.0	0.0	0.0	0.0	91.7	0.0	8.3	0.0	0.0
SAINT PAUL HIGH SCHOOL	12	41.7	58.3	0.0	0.0	25.0	8.3	0.0	0.0	33.3	0.0	16.7	16.7	0.0
WESTERN CHRISTIAN HIGH SCHOOL	12	75.0	25.0	0.0	0.0	0.0	8.3	8.3	0.0	83.3	0.0	0.0	0.0	0.0
COASTLINE COMMUNITY COLLEGE	11	63.6	36.4	0.0	0.0	9.1	9.1	9.1	0.0	63.6	0.0	9.1	0.0	0.0
MARYMOUNT PALOS VERDES COLLEGE	11	81.8	18.2	0.0	9.1	36.4	0.0	0.0	0.0	9.1	18.2	0.0	27.3	0.0
MONTEREY PENINSULA COLLEGE	11	18.2	81.8	0.0	9.1	0.0	9.1	27.3	0.0	27.3	9.1	0.0	18.2	0.0
PIONEER HIGH SCHOOL	11	54.5	45.5	0.0	0.0	27.3	18.2	18.2	0.0	18.2	0.0	9.1	0.0	9.1
REDLANDS SENIOR HIGH SCHOOL	11	63.6	36.4	0.0	0.0	0.0	0.0	36.4	9.1	45.5	9.1	0.0	0.0	0.0
SAN JOAQUIN DELTA COLLEGE	11	54.5	45.5	0.0	9.1	0.0	18.2	18.2	0.0	45.5	0.0	9.1	0.0	0.0
SOUTH DAKOTA	11	72.7	27.3	0.0	45.5	0.0	0.0	0.0	0.0	27.3	0.0	18.2	0.0	9.1
UNIVERSITY OF THE PACIFIC	11	72.7	27.3	0.0	9.1	0.0	9.1	9.1	0.0	72.7	0.0	0.0	0.0	0.0
VILLA PARK HIGH SCHOOL	11	45.5	54.5	0.0	0.0	0.0	0.0	0.0	0.0	90.9	0.0	9.1	0.0	0.0
WESTMONT COLLEGE	11	72.7	27.3	0.0	0.0	0.0	0.0	0.0	0.0	81.8	0.0	18.2	0.0	0.0
ANTELOPE VALLEY COLLEGE	10	30.0	70.0	0.0	20.0	0.0	0.0	0.0	0.0	70.0	0.0	0.0	0.0	10.0
ARKANSAS	10	60.0	40.0	0.0	0.0	0.0	0.0	10.0	0.0	80.0	0.0	20.0	10.0	0.0
BUTTE JUNIOR COLLEGE	10	40.0	60.0	0.0	0.0	0.0	0.0	10.0	0.0	90.0	0.0	0.0	0.0	0.0
CORONA SENIOR HIGH SCHOOL	10	30.0	70.0	0.0	0.0	10.0	0.0	0.0	0.0	90.0	0.0	0.0	0.0	0.0
DE ANZA COLLEGE	10	60.0	40.0	0.0	10.0	10.0	0.0	10.0	0.0	60.0	0.0	10.0	0.0	0.0
DON BOSCO TECHNICAL HIGH SCHOOL	10	0.0	100.0	0.0	0.0	20.0	0.0	0.0	0.0	40.0	20.0	0.0	0.0	20.0
EL DORADO HIGH SCHOOL	10	40.0	60.0	0.0	0.0	0.0	10.0	10.0	0.0	70.0	0.0	10.0	0.0	0.0
FONTANA SENIOR HIGH SCHOOL	10	50.0	50.0	0.0	20.0	10.0	10.0	0.0	0.0	50.0	0.0	10.0	0.0	0.0
GARFIELD-JAMES A-SENIOR HIGH SCHOOL	10	40.0	60.0	0.0	0.0	70.0	10.0	0.0	0.0	0.0	0.0	10.0	10.0	0.0
INGLEWOOD HIGH SCHOOL	10	70.0	30.0	0.0	70.0	0.0	0.0	0.0	0.0	10.0	0.0	10.0	0.0	10.0
LINCOLN-ABRAHAM-SENIOR HIGH SCHOOL	10	20.0	80.0	0.0	10.0	30.0	10.0	40.0	0.0	0.0	10.0	0.0	0.0	0.0
LUTHERAN HIGH SCHOOL	10	80.0	20.0	0.0	10.0	0.0	0.0	0.0	0.0	90.0	0.0	0.0	0.0	0.0
MILITARY G.E.D.	10	70.0	30.0	0.0	0.0	30.0	0.0	20.0	0.0	30.0	0.0	0.0	20.0	0.0
MONTANA	10	60.0	40.0	0.0	0.0	0.0	0.0	10.0	0.0	70.0	0.0	20.0	0.0	0.0
MONTEBELLO SENIOR HIGH SCHOOL	10	80.0	20.0	0.0	0.0	40.0	0.0	20.0	0.0	30.0	0.0	10.0	0.0	0.0
ROSEMEAD HIGH SCHOOL	10	50.0	50.0	0.0	0.0	20.0	10.0	10.0	0.0	40.0	0.0	0.0	0.0	20.0
SOUTH GATE SENIOR HIGH SCHOOL	10	60.0	40.0	0.0	30.0	40.0	10.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0
VERMONT	10	50.0	50.0	0.0	0.0	10.0	0.0	10.0	0.0	30.0	0.0	10.0	30.0	10.0
* Inst. with less than 10 students	1645	49.5	50.5	0.9	11.8	8.6	3.5	9.7	0.3	48.4	1.8	7.8	5.0	2.1
	22086	51.6	48.4	1.1	6.3	10.5	3.8	8.6	0.4	52.7	1.9	8.4	4.6	1.8

APPENDIX F

CSU TRANSFER GENDER AND ETHNIC DISTRIBUTION FOR STUDENTS WHO COMPLETED 24 OR UNITS AT MSAC

Mount San Antonio College
Computer Services
CSU Transfer Sex/Ethnic Distr. 24+ Units

Sample: All Students

MSAC: Summer 78 thru Spring 87
CSU: Summer 78 thru Spring 87

Institution of Origin	Total	(F) Fem	(M) Male	(1) Indn	(2) Black	(3) Chicn	(4) Hispn	(5) Asian	(6) Pacif	(7) White	(8) Other	(9) Nresp	(D) Decln	(F) Filip
MOUNT SAN ANTONIO COLLEGE	6276	3056	3220	58	340	693	261	448	28	3528	124	388	274	134
CITRUS COLLEGE	459	223	236	9	22	32	16	28	1	277	8	40	23	3
CHAFFEY COLLEGE	437	206	211	7	22	44	16	24	1	249	7	25	18	4
RIO DONDO COLLEGE	234	100	134	4	3	69	11	19	1	88	3	23	12	1
CALIF ST POLY UNIV AT POMONA	206	93	113	1	11	16	6	17	0	118	4	18	14	1
EAST LOS ANGELES COLLEGE	199	76	123	3	10	67	9	29	1	34	6	23	15	2
PASADENA CITY COLLEGE	191	93	98	1	7	14	8	17	0	109	4	17	11	3
CALIF ST COLLEGE AT FULLERTON	183	91	92	1	6	22	6	11	1	102	2	21	10	1
FULLERTON JUNIOR COLLEGE	183	86	97	2	0	11	6	17	1	125	4	12	4	1
CALIF ST UNIV AT LOS ANGELES	156	74	82	1	11	25	6	11	0	71	1	23	6	1
LOS ANGELES CITY COLLEGE	99	47	52	1	25	8	8	19	0	9	1	9	7	12
ORANGE COAST COLLEGE	92	40	52	1	3	1	2	10	0	69	0	5	1	0
UNIV OF CALIF LOS ANGELES	91	54	37	0	9	7	3	17	1	37	3	7	4	3
WILSON-GLEN A-HIGH SCHOOL	86	45	41	0	2	7	4	33	1	34	0	1	2	2
CERRITOS COLLEGE	83	41	42	3	7	9	2	6	0	42	3	5	4	2
SAN BERNARDINO CALLEY	77	32	45	0	10	12	3	3	0	39	2	6	2	0
UNIV OF CALIF IRVINE	72	42	30	0	5	2	5	18	0	34	0	4	1	3
WALNUT HIGH SCHOOL	71	49	22	1	4	2	3	10	1	39	0	4	1	3
RIVERSIDE CITY COLLEGE	67	31	36	0	5	9	3	4	0	38	1	3	4	0
CALIF ST UNIV AT LONG BEACH	66	32	34	1	5	9	2	5	1	40	0	3	0	0
LA VERNI COLLEGE	64	39	25	1	6	5	7	2	0	31	1	7	4	0
LOS ALTOS HIGH SCHOOL	60	35	25	0	0	6	2	6	0	42	3	1	0	0
WEST COVINA HIGH SCHOOL	58	28	30	1	5	4	2	2	0	36	2	2	3	1
EL CAMINO COLLEGE	57	32	25	1	14	4	2	4	1	25	1	3	2	0
CALIF ST UNIV AT SAN DIEGO	52	26	26	2	6	6	1	1	0	31	1	2	1	1
CYPRESS COLLEGE	52	29	23	0	1	2	4	3	0	32	2	5	3	0
UNIV OF SOUTHERN CALIFORNIA	52	26	26	1	4	6	2	6	0	28	1	3	0	1
SANTA ANA COLLEGE	50	25	25	1	2	5	2	7	0	22	1	4	6	0
LONG BEACH CITY COLLEGE	49	19	30	1	4	3	4	1	0	29	0	5	2	0
LOS ANGELES PIERCE COLLEGE	49	18	31	0	0	3	3	4	0	30	0	7	1	1
SADDLEBACK COLLEGE	49	19	30	1	2	3	2	6	1	28	4	1	1	0
SANDIEGO MESA COLLEGE	49	20	29	1	5	3	0	1	1	30	0	5	2	1
TEXAS	49	23	26	2	0	0	1	0	1	38	2	2	3	0
ROWLAND-JOHN A-HIGH SCHOOL	48	26	22	1	0	3	4	7	3	24	2	0	3	1
SOUTH HILLS HIGH SCHOOL	47	26	21	1	0	2	2	3	0	37	0	0	2	0
GOLDEN WEST COLLEGE	45	26	19	0	0	1	0	6	0	36	1	0	1	0
LOS ANGELES TRADE TECH COLL	45	14	31	1	14	6	3	1	0	7	0	11	2	0
AZUSA PACIFIC COLLEGE/ AZUSA COLLEGE	43	28	15	1	3	1	2	0	1	25	1	5	3	1
BISHOP AMAT MEMORIAL HIGH	43	25	18	0	2	4	2	2	1	22	1	1	4	4
MOGALES HIGH SCHOOL	42	25	17	2	2	8	5	3	0	13	0	1	0	8
POMONA SENIOR HIGH SCHOOL	41	30	11	0	20	1	1	2	0	15	1	1	0	0
CLAREMONT HIGH SCHOOL	40	28	12	1	3	0	0	3	0	29	1	0	3	0
IMPERIAL VALLEY COLLEGE	39	14	25	1	2	21	0	0	0	5	1	6	3	0
ARIZONA	38	17	21	1	3	2	1	1	0	21	0	7	2	0
LA PUENTE HIGH SCHOOL	36	26	10	0	0	13	2	8	0	7	3	2	1	0
ROYAL OAK HIGH SCHOOL	36	21	15	2	0	0	1	5	0	25	0	2	1	0

Mount San Antonio College
Computer Services

Sample: All Students — CSU Transfer Sex/Ethnic Distr. 24+ Units — MSAC: Summer 78 thru Spring 87
CSU: Summer 78 thru Spring 87

Institution of Origin	Total	(F) Fem	(M) Male	(1) Indn	(2) Black	(3) Chicn	(4) Hispn	(5) Asian	(6) Pacif	(7) White	(8) Other	(9) Nresp	(D) Decln	(F) Fili
DON ANTONIO LUGO HIGH	10	5	5	0	0	0	0	1	0	7	0	0	0	2
UNIV OF CALIF SANTA BARBARA	36	20	16	0	2	0	0	6	0	22	1	1	2	2
DON BOSCO TECHNICAL INST	35	0	35	1	0	15	2	0	0	12	0	0	3	2
GANESHA SENIOR HIGH SCHOOL	35	18	17	0	5	5	2	3	0	18	0	1	1	0
EDGEWOOD HIGH SCHOOL	34	23	11	0	1	5	0	3	0	21	0	1	2	1
BONITA HIGH SCHOOL	33	17	16	0	2	1	1	3	0	24	1	1	0	0
UNIV. OF CALIF RIVERSIDE	33	19	14	0	0	3	4	3	0	17	1	2	3	0
CALIF ST UNIV AT NORTHRIDGE	31	19	12	0	1	4	1	2	0	21	0	1	1	0
GROSSMONT COLLEGE	31	15	16	1	1	3	0	0	0	25	0	1	0	0
SAN DIMAS HIGH SCHOOL	31	20	11	0	3	0	0	5	0	17	0	2	1	3
UPLAND HIGH SCHOOL	31	21	10	0	1	0	0	6	0	22	0	2	0	0
SANTA MONICA CITY COLLEGE	29	10	18	0	2	2	2	5	0	13	1	0	3	1
GLENDALE COLLEGE	27	14	13	0	0	2	1	5	0	12	2	5	0	0
LOS ANGELES HARBOR COLLEGE	27	11	16	0	4	5	1	2	0	10	1	2	0	2
PALOMAR COLLEGE	27	15	12	1	0	5	2	1	0	14	1	1	2	0
TENNESSEE	27	11	16	0	2	0	1	3	0	16	0	4	1	0
CALIFORNIA	26	8	16	0	1	4	1	0	0	16	0	2	1	1
IDAHO	26	15	11	0	1	1	0	2	0	20	0	1	1	0
NEW MEXICO	25	16	10	1	3	1	3	1	0	11	1	3	2	0
CITY COLLEGE OF SAN FRANCISCO	25	7	18	0	3	1	0	12	1	7	0	0	0	1
GAREY SENIOR HIGH SCHOOL	25	17	8	1	8	5	2	4	0	1	1	3	0	0
VICTOR VALLEY COLLEGE	25	10	15	0	2	0	0	4	0	14	1	3	1	0
COLLEGE OF THE DESERT	24	6	18	0	3	7	0	2	0	10	1	0	1	0
LOS ANGELES VALLEY COLLEGE	24	10	14	0	2	0	2	2	0	14	0	3	1	0
CALIF ST POLY UNIV SAN LUIS OB	23	15	8	0	0	3	0	2	0	15	0	1	2	0
MASSACHUSETTS	23	9	14	0	1	1	0	4	0	14	1	2	0	0
WHITTIER COLLEGE	23	12	10	0	2	2	0	4	0	10	0	4	1	0
COVINA HIGH SCHOOL	22	10	12	0	1	0	0	2	0	18	0	1	0	0
UNIV OF CALIF SAN DIEGO	21	10	11	0	2	2	0	2	0	9	2	3	0	1
WORKMAN-WILLIAM A-HIGH SCHOOL	21	15	6	0	3	3	2	3	0	10	0	0	0	0
CALIF ST COLLEGE AT SAN BERNAN	20	15	5	1	3	1	0	1	1	8	0	2	3	0
CHAPMAN COLLEGE	20	10	10	0	1	1	2	1	0	12	1	0	1	1
COMPTON COLLEGE	20	12	8	0	13	0	0	0	0	2	0	2	2	1
MT. SAN JACINTO COLLEGE	20	8	12	0	0	1	1	1	0	16	0	0	1	0
SANTA BARBARA CITY COLLEGE	19	6	13	0	0	1	1	1	0	12	0	3	1	0
UNIV OF REDLANDS	19	11	8	0	1	4	0	0	0	12	0	2	0	0
BAKERSFIELD COLLEGE	18	11	7	0	1	3	1	1	0	11	0	0	0	1
CALIF ST UNIV AT CHICO	18	5	13	0	0	2	0	0	0	13	0	2	1	0
CRAFTON HILLS COLLEGE	18	10	8	1	1	1	0	0	0	14	0	0	1	0
DAMIEN HIGH-CATH/POMONA CATH	18	0	18	1	0	5	1	0	0	10	0	1	0	0
LOMA LINDA UNIVERSITY	18	9	9	0	2	2	1	4	0	6	1	2	0	0
POMONA CATHOLIC GIRLS HIGH	18	18	0	0	0	3	1	1	0	11	2	0	0	0
UNIVERSITY OF CALIF BERKELEY	18	5	12	0	0	2	0	6	0	8	0	0	1	1
BASSETT HIGH SCHOOL	17	11	6	0	2	10	0	1	0	3	0	0	0	1
CALIF STATE UNIV HUMBOLDT	17	6	11	1	0	4	1	0	0	9	0	2	0	0
CHARTER OAK HIGH SCHOOL	17	7	10	0	1	1	1	1	0	9	1	2	1	0
PHILIPPINES	17	8	9	0	0	0	0	1	0	0	0	3	0	13

Mount San Antonio College
Computer Services

Sample: All Students — CSU Transfer Sex/Ethnic Distr. 24+ Units — MSAC: Summer 78 thru Spring 87 CSU: Summer 78 thru Spring 87

Institution of Origin	Total	(F) Fem	(M) Male	(1) Indn	(2) Black	(3) Chicn	(4) Hispn	(5) Asian	(6) Pacif	(7) White	(8) Other	(9) Nreap	(D) Decln	(E) Fili
CUESTA COLLEGE/SAN LUIS OBISPO	18	6	10	2	0	2	0	0	0	10	1	1	0	0
HANCOCK-ALLAN-COLLEGE	16	7	9	0	1	2	0	0	0	10	1	1	0	1
NORTHVIEW HIGH SCHOOL	16	6	10	0	1	0	2	2	0	9	0	0	1	1
SAINT LUCYS PRIORY SCHOOL	16	16	0	1	0	0	3	1	0	11	0	0	0	0
VIRGINIA	16	7	9	0	1	1	0	0	0	13	1	0	0	0
GLENDORA HIGH SCHOOL	15	8	6	0	0	0	0	0	1	14	0	0	0	0
MAINE	15	5	10	0	0	4	0	1	0	8	0	1	1	0
NORTH DAKOTA	15	11	4	0	2	0	0	1	0	10	0	2	0	1
SOUTHWESTERN COLLEGE	15	6	9	1	3	3	0	1	0	4	0	2	0	1
WEST LOS ANGELES COLLEGE	15	7	8	0	7	0	0	2	0	2	0	2	2	0
CALIF STATE COLLEGE AT DOMINGUEZ HIGH	14	9	5	0	3	2	1	1	0	6	0	1	0	0
FRESNO CITY COLLEGE	14	7	7	0	1	2	0	0	0	8	0	3	0	0
ILLINOIS	14	7	7	0	0	0	0	0	0	10	2	1	1	0
INSTITUTION UNKNOWN	14	6	8	1	1	0	0	1	0	7	0	3	1	0
MOORPARK COLLEGE	14	5	9	0	1	0	0	2	0	11	0	0	0	0
SAN DIEGO CITY COLLEGE	14	4	10	0	3	1	0	0	0	5	0	4	1	0
SANTA ROSA JUNIOR COLLEGE	14	4	10	1	0	1	0	0	0	10	0	1	1	0
UNIV OF CALIF DAVIS	14	6	8	0	1	2	0	0	0	8	1	0	2	0
VENTURA COLLEGE	14	7	7	1	0	1	2	3	0	4	0	3	0	0
CALIF ST UNIV AT SAN JOSE	13	6	7	0	3	0	2	1	0	5	0	1	1	0
CHAFFEY HIGH SCHOOL	13	7	6	0	1	1	0	1	0	8	0	1	1	0
DIABLO VALLEY COLLEGE	13	10	3	0	1	3	0	0	0	8	0	0	1	0
BALDWIN PARK HIGH SCHOOL	12	7	5	0	0	1	0	4	0	5	0	0	0	2
BIOLA COLLEGE	12	6	6	0	1	2	0	1	0	6	2	0	0	0
CAL STATE POMONA EXTN	12	3	9	1	1	2	0	3	0	4	0	0	1	0
CALIF STATE UNIV AT FRESNO	12	10	2	1	3	1	1	1	1	0	0	1	0	0
CALIF STSTE UNIV AT SAN FRANCISCO	12	6	6	0	1	2	0	2	0	4	0	3	0	0
CHINA REPUBLIC OF FORMOSA TAIWAN	12	8	4	0	0	1	0	9	0	0	0	2	0	0
DELEWARE	12	4	8	0	0	0	1	1	0	5	1	1	1	2
LOS ANGELES SOUTHWEST COLLEGE	12	7	5	0	8	0	0	0	0	1	0	2	1	0
OKLAHOMA	12	7	5	1	1	1	0	1	0	6	1	1	0	0
PITZER COLLEGE	12	9	3	0	2	4	0	0	0	4	0	2	0	0
WEST VALLEY COLLEGE	12	5	7	0	0	1	0	1	0	10	0	0	0	0
ALABAMA	11	6	5	0	3	0	1	0	0	2	0	4	1	0
CALIF ST CLG AT FULLERTON E	11	5	6	0	0	3	0	1	0	3	1	2	1	0
GEORGIA	11	7	4	0	0	0	0	3	0	6	1	1	0	0
MARYLAND	11	4	7	1	0	0	0	1	0	6	0	3	0	0
NEW JERSEY	11	4	7	0	0	3	0	0	0	4	1	1	2	0
OREGON	11	5	6	0	0	0	1	0	0	8	0	1	0	1
SONORA HIGH SCHOOL	11	4	7	0	0	0	2	0	0	8	0	1	0	0
AMERICAN RIVER COLLEGE	10	9	1	0	0	0	0	0	0	5	0	3	2	0
BARSTOW COLLEGE	10	5	5	0	1	2	1	0	0	4	0	1	1	0
CHINO SENIOR HIGH SCHOOL	10	4	6	0	0	2	0	2	0	5	0	0	1	0
COLLEGE OF SAN MATEO	10	3	7	0	1	0	1	2	0	4	2	0	0	0
ANA SANTA CL														

Mount San Antonio College
Computer Services

Sample: All Students

CSU Transfer Sex/Ethnic Distr. 24+ Units

MSAC: Summer 78 thru Spring 87
CSU: Summer 78 thru Spring 87

Institution of Origin	Total	(F) Fem	(M) Male	(1) Indn	(2) Black	(3) Chicn	(4) Hispn	(5) Asian	(6) Pacif	(7) White	(8) Other	(9) Nresp	(D) Decln	(F) Fill
EL MONTE HIGH SCHOOL	10	6	4	0	0	3	1	2	0	4	0	0	0	0
LOYOLA MARYMOUNT UNIV/ LOYOLA UNIV O	10	5	5	0	0	1	0	1	0	6	0	1	1	0
MARYMOUNT PALOS VERDES COLL	10	8	2	0	1	4	0	0	0	0	2	0	3	0
NEBRASKA	10	3	7	0	1	0	1	0	0	8	0	0	0	0
PACIFIC CHRISTIAN COLLEGE	10	9	1	0	2	1	0	0	0	6	0	1	0	0
*Inst with less that 10 Students	1061	515	546	5	103	82	41	140	6	526	20	59	50	29
	13354	6544	6810	143	845	1434	533	1135	55	7187	261	909	586	266

17 Feb 1989 16:48:56
CSUQ023 EXEC

APPENDIX G

REPORTED MAJORS OF CSU AND UC SURVEY RESPONDENTS

DEGREES EARNED BY CSU SURVEY RESPONDENTS

BY B.A. MAJOR

Adult Sec/Ed.	1	
American Studies	1	1
Anthropology		1
Art	6	2
Art (studio pref.)		1
Behavioral Science		2
Child Development	4	
Communications	6	8
Counseling/Guidance	1	
Criminal Justice		3
Economics	3	3
Education	2	
English	4	1
Environmental Studies	1	
Geography	1	1
Graphic Design	3	
History	5	3
Humanities		1
Human Services	2	2
Industrial Arts		1
Interior Design	2	
Journalism	2	
Liberal Arts	1	1
Liberal Studies	13	3
Music		1
*Mathematics	1	
Music Education	1	1
Physiology	2	
Political Science		4
Psychology	5	4
Public Administration		3
Radio/Television	1	
Recreation Administration		1
Religious Studies		1
Social Sciences	1	
Social Work	1	1
Sociology	1	
Spanish		1
Special Education	1	
Speech	2	
Speech Pathology	4	
Theater Arts	1	1
Total	79	
Percent of Total	60.3%	

Total BA Degrees = 131

*BA/BS Mathematics, UC Riverside

B.S. Major		
Accountancy	7	6
Agricultural Bio.		1
Agricultural Ed. Sci.	1	
Agricultural Eng.		1
Animal Science	1	
Aviation		4
*Biological Sciences	1	
Business Admin.	16	22
Chemistry	1	2
Civil Engineering		2
Computer Science	3	2
**Dental Health		1
Dietetics	3	

B.S. Major		
Finance	4	
Financial Serv.		1
Geology		2
Electrical Eng.		3
Electrical Techn.		1
Engineering	2	2
Eng. Technology		1
Home Economics	4	
Hotel Dist. Mgt.	2	1
Industrial Mgt.		1
Information Systems		2
Landscape Architect.	1	
Mgt. Business	2	3
Manufacturing Eng.		1
Manufacturing Tech.		2
Marketing/Bus. Admin.	6	3
Mathematics		1
Microbiology	1	
Nursing	6	1
Ornamental Hort.		1
Other	1	
Personal Resources Mgt.	3	1
Physical Ed.	7	3
Physics		2
Production Operations Mgt.		1
Psychology	2	1
Real Estate	1	
Retailing	1	
Soil Sciences		1
Zoology	1	

Total	76	76
Percent of Total	50%	50%
Total B.S.	152	

*B.S. Biological Sciences Irvine
**B.S. Dental Health USC

DEGREES EARNED BY UC SURVEY RESPONDENTS BY MAJOR

B.A. or A.B. Major	UCB		UCD		UCI		UCLA		UCR		UCSD		UCSB		UCSC		*CSU	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Art						1		1										
Biology										1		1						
Bus. Economics Acct.													1	1				
Communications													1					
Comparative Lit.					1													
Dance									1									
*Economics					2		2	2			1						1	
Econ/Bus. Econ.															1	1		
English							1	1			1							
Geography														1				
Geograph/ Ecosystems								1										
History		1			1			1										
Hum. Dev.										1								
Humanities		1			1													
Lib. Studies													2	1				

B.A. or A.B. Major	UCB		UCD		UCI		UCLA		UCR		UCSD		UCSB		UCSC		*CSU	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Linguistics/ Psych.								1										
Mathematics									1									
Music								1										
Philosophy							1											
Pol. Sci.			1											1				
Psychology					1	1	5	1	1									
Sociology, Law & Society									1									
Sociology											1		1					
Theater Arts															1			
Total		2		2	6	2	9	9	4	2	3	1	5	4	2	1	1	

BS/BA/BS Major	UCB		UCD		UCI		UCLA		UCR		UCSD		UCSB		UCSC		*CSU	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Biochemistry								1		2								
Biology									3	1								
Bio. Sci.					2	4												1
Botany/Plant Sci.										1								
Bus. Admin.									1								1	
Chem. Eng.		1																
Economics										1								
Elec. Eng.								1										
Home Ec.																	3	
Inf. & Comp. Sci.						1												
Kinesiology								1										
Mathematics						1		1										
Mech. Eng.											1							
Physics					1													
Psychobiology							1											
Total		1			2	6	2	3	5	5	1						4	1

*Degree reported completed at CSU.

APPENDIX H

SURVEY RESPONDENT HOME LANGUAGE FOR CSU AND UC TRANSFERS

HOME LANGUAGES FOR CSU, UC TRANSFERS

Home Languages	CSU (N=474)	%	UC (N=114)	%
English	298	62.8	52	45.6
Spanish	21	4.4	8	7.0
Bilingual	89	18.9	35	30.7
English/Arabic	2		1	
English/Chinese	3			
English/Dutch	2			
English/Finish	1			
English/Farsi	1		1	
English/German	4		1	
English/Greek	2		1	
English/Italian	6			
English/Japanese	4			
English/Korean	3		1	
English/Latin	1			
English/Ukrainian	1			
English/Polish	2			
English/Russian	1			
English/Spanish	37		28	
English/Tagalog	5		2	
English/Yiddish	1			
English/Chinese/ Burmese	1			
English/Chinese/ Malaysian	1			
English/Arabic/ Spanish	1			
English/Armenian/ Farsi	1			
English/Armenian/ German	1			
English/Danish/ Swedish	1			
English/Spanish/ Navajo	1			
English/French German	1			
English/German/ Swiss	1			
English/Spanish/ Hungarian	1			
English/German/ Spanish	1			
English/Italian/ Spanish/French	1			
English/Hebrew/				

Home Languages	CSU (N=474)	%	UC (N=114)	%
Yiddish/Russian/ Lithuanian	1		-	
Non-English				
Arabic	1			
Armenian	1			
Chinese	2		3	
Dutch	1			
Farsi	1			
Greek			2	
German	4			
Hungarian	2			
Italian	1		1	
Japanese	4		1	
Korean			2	
Norwegian	1			
Tagalog	2			
Vietnamese	9		1	
Arabic/French	1			
French/Hebrew	1			
French/Italian	1		1	
Hungarian/French			1	
Laos/Chinese	1			
Punjabi/Nurdu	1		2	
Taiwanese/Mandarin			1	
Urdu/Hindu	1			
Cantonese/Indones.	1			
Flemish/French/ German			1	
German/Latin/ French	1			
Ukrainian/Russian/ Polish/Czech/Germ.	1			
Total Non-English	38	7.8	18	14.9
No Response	29	6.1	2	1.8
Total	474	100.0	114	100.0

REFERENCES

American Association of Community and Junior Colleges. (1983). Fact file. Washington, DC: American Association of Community and Junior Colleges.

Anderson, B. D. (1967). Comparison of enrolled and non-enrolled applicants for Modesto Junior College, Fall 1966.

Anderson, E. (1985). Forces influencing student persistence. In L. Noel (Ed.), Increasing student retention. San Francisco: Jossey-Bass.

Anderson, E. C. (1978). A retention design applied to an equal opportunity program. In L. Noel (Ed.), Reducing the dropout rate. San Francisco: Jossey-Bass.

Assembly Bill 1725. (1988). Chapter 973, Statutes of 1988, California State Legislature.

Astin, A. W. (1975). Preventing students from dropping out. San Francisco: Jossey-Bass.

Astin, A. W., Green, K. C., Korn, S., & Maier, M. (1984). The American freshman: National norms for fall 1984. Cooperative Institutional Research Program of the University of California, Los Angeles and the American Council on Education.

Atondo, A., Chavez, M., & Requa, R. (1987). A study of the Puente Project 1983-1986. San Jose, CA: Evergreen Valley College.

Baldwin, A. (1984, November). Placement and follow-up report: Graduate survey responses and state defined placement status of occupational programs for the academic year 1982-83. Research Report No. 84-31. Miami: Miami Dade Community College Office of Institutional Research.

Baratta, F., & Apodaca, E. C. (1988, February). A profile of California community college transfer students at the University of California. Office of the President, University of California.

Baratta, F., & Apodaca, E. C. (1984, September). A profile of California community college transfer students at the University of California. Office of the President, University of California.

Beal, P. E., & Noel, L. (1980). What works in student retention. Iowa City, IA: American College Testing Program and National Center for Higher Education Management Systems. ED197 635.

Bean, J. P., & Creswell, J. W. (1980). Student attrition among women at a liberal arts college. Journal of College Student Personnel, 21(7), 320-326.

Belcher, M. (1984, July). Initial transcript analysis for a sample of students who failed two or more sections versus a sample who passed all four sections of the June 1984 CLAST. Research Report No. 84-21. Miami: Miami Dade Community College.

Belcher, M., & Losak, J. (1985, April). Providing educational opportunity for students who were initially ineligible to enroll in the state university system. Research Report No. 85-15. Miami: Miami-Dade Community College.

Bessire, J. D. (1985, January). Transfer education: Why all the attention. ADCON, ACCCA Newsletter, pp. 1-3.

Bird, G. V. (1956). Preparation for advanced study, the public junior college. Fifty-fifth Yearbook of the National Society for the Study of Education. Chicago: The University of Chicago Press, LV, Part I.

Board of Governors, California Community Colleges. (1989, January). AB 1725, a comprehensive analysis.

Booth, G. (1987). The community college course with drawer: A longitudinal analysis of the program reduction phenomenon. Unpublished Ph.D. dissertation, The Claremont Graduate School.

Briggs, C., & Elkind, D. (1977). Characteristics of early readers. Perceptual and Motor Skills, 44, 1231-1237.

Buriel, R. (1987). Understanding the motives behind Mexican-American school achievement. Paper presented at The Claremont Reading Conference, Claremont, CA, March 20, 1987.

Buriel, R., & Cardoza, D. (1988). Sociocultural correlates of achievement among three generations of Mexican-American high school seniors. American Educational Research Journal (Summer), 25(2), 177-192.

Byock, G. J., & Schneiderman, P. (1987). Transfer Alliance Program (TAP), 1985-1986, executive summary and attachments. Los Angeles: Center for Academic Interinstitutional Programs, UCLA.

California Association of Community Colleges. (1988, May). Directors' Legislation Report.

California Community Colleges Chancellor's Office Analytical Studies Unit. (1984, October). Transfer education. Sacramento: Author.

California Community Colleges Chancellor's Office. (1981, July). Transfer students. Sacramento: Author.

California Postsecondary Education Commission. (1985, March). Background papers to a prospectus for California postsecondary education. Report 85-20. Sacramento: Author.

California Postsecondary Education Commission. (1985). California college-going rates, 1985 update, Sept. report 86-25. Sacramento: Author.

California Postsecondary Education Commission. (1986). California college-going rates, 1985 update, Sept. report 87-38. Sacramento: Author.

California Postsecondary Education Commission. (1988, March). Eligibility of California's 1986 high school graduates for admission to its public universities. Commission report 88-10. Sacramento: Author.

California Postsecondary Education Commission. (1988, November 10). Full-year transfer statistics. News release. Sacramento: Author.

California Postsecondary Education Commission. (1988, October). Legislation affecting higher education enacted during the 1987-88 session. Staff report series, Commission report 88-34. Sacramento: Author.

California Postsecondary Education Commission. (1989, April). Meeting the cost of attending college: A staff analysis of the demographic characteristics of California undergraduates. Report 84-15. Sacramento: Author.

California Postsecondary Education Commission. (1988, October 31). Progress in implementing the recommendations of the Commission's 1987 report on strengthening transfer and articulation. A staff report to the California Postsecondary Education Commission, draft. Sacramento: Author.

California Postsecondary Education Commission. (1985, March 4). Reaffirming California's commitment to transfer recommendations for aiding student transfer from the California community colleges to the California State University and the University of California. Report 85-15. Sacramento: Author.

California Postsecondary Education Commission (1986). Staff report: Progress on the Ford Foundation-funded study of relationships between two- and four-year institutions. Sacramento: Author.

California Postsecondary Education Commission. (1987, November). Strengthening transfer and articulation policies and practices in California's colleges and universities. Progress since 1985 and suggestions for the future. Report 87-41. Sacramento: Author.

California Postsecondary Education Commission. (1976, February). Through the open door: A study of patterns of enrollment and performance in California's community colleges. Report 76-1. Sacramento: Author.

California Postsecondary Education Commission. (1982, Fall). Transfer student statistics. Report 83-11. Sacramento: Author.

California Postsecondary Education Commission. (1983, Fall). Transfer student statistics. Report 84-10. Sacramento: Author.

California Postsecondary Education Commission. (1984, Fall). Transfer student statistics. Report 85-21. Sacramento: Author.

California Postsecondary Education Commission. (1985, Fall). Transfer student statistics. Report 86-11. Sacramento: Author.

California Postsecondary Education Commission. (1986, Fall). Transfer student statistics. Report 87-22. Sacramento: Author.

California Postsecondary Education Commission. (1984, June). Views from the field on community college transfer. Testimony to the Ad Hoc Committee on California Postsecondary Education Commission. Commission report 84-20, expanded August, 1984. Sacramento: Author.

California State Department of Education. (1960). A master plan for higher education in California, 1960-1975. Sacramento: Author.

California State University Office of the Chancellor, Division of Analytic Studies. (1987, January). Outreach and recruitment information into innovation. Sacramento: Author.

California State University Office of the Chancellor, Division of Instructional Research. (1983, May). Those who stay--Phase IV. Technical memorandum number 10. Long Beach: California State University, Long Beach.

Cardinal, J. (1981). The influence of some special network characteristics on persisting/nonpersisting transfer students from nine community colleges to UCLA. Unpublished doctoral dissertation, UCLA, Los Angeles.

Case, C. L., & Goth, G. W. (1987, May). Transfer science students: A 17 year follow-up study fall 1969 through spring 1985. San Mateo, CA: Skyline College.

Clark, B. R. (1960). Open door college: A case study of the development of San Jose Junior College. New York: McGraw Hill.

Clark, M. (1984). Literacy at home and at school: Insights from a study of young fluent readers. In H. Goelman, A. Oberg, & F. Smith (Eds.), Awakening to literacy. Exeter, NH: Heinemann Educational Books.

Coffey, J. C. (1986). Update on Los Rios transfer statistics: Executive summary. Sacramento: Los Rios Community College District.

Cohen, A. M. (1979). Counting the transfer students. Junior College Resource Review. Los Angeles: Eric Clearinghouse for Junior Colleges.

Cohen, A. M. (1985). Helping ensure the right to success: An Eric review. Community College Review, 12(3), pp. 4-9.

Cohen, A. M., & others. (1985). Transfer education in American community colleges. Los Angeles: Center for the Study of Community Colleges.

Cohen, A. M. (1983). Understanding the transfer function in California. Community College Review, 10(4), 18-23.

Cohen, A. M., & Brawer, F. B. (1982). The American community college. San Francisco: Jossey Bass Publishers.

Cohen, A. M., & Brawer, F. B. (1970). Student characteristics: Personality and dropout propensity. San Francisco: Jossey Bass Publishers.

Cohen, A. M., Brawer, F. B., & Bensimon, E. M. (1985). Transfer education in American community colleges. Los Angeles, CA: Center for the Study of Community Colleges.

Cohen, A. M., Palmer, J. C., & Zwemer, K. D. (1986). Key resources on community colleges. San Francisco: Jossey-Bass.

Cohen, E. L. (1987). Evaluation of developmental English courses at Santa Barbara City College: A pilot study, 1984-85. Santa Barbara: Santa Barbara City College.

Commission for the Renewal of the Master Plan for Higher Education. (1987, July). The Master Plan renewed: Unity, equity, quality, and efficiency in California postsecondary education.

Commission for the Review of the Master Plan for Higher Education. (1987, May 18). Second draft review of the master plan for higher education in California. Sacramento: Author.

Compton Community College. (1984). Comptom Community College's transfer opportunities program: Narrative report to the Ford Foundation. Compton, CA: Author.

Cope, R. G., & Hannah, W. (1975). Revolving college doors: The causes and consequences of dropping out and transferring. New York: Wiley.

Cross, K. P. (1971a). Access and accommodation in higher education. In W. B. Martin, H. L. Hodgkinson, and K. P. Cross, The White House conference on youth. Berkeley: University of California Center for Research and Development in Higher Education.

Cross, K. P. (1971b). Beyond the open door: New students to higher education. San Francisco: Jossey Bass.

Delzangle, J. (1987). Dropouts and graduates: A four year comparative study in a middle class suburban district. Unpublished Ph.D. dissertation, The Claremont Graduate School, Claremont, CA.

Donovan, R. A. (Ed.). (1987). Transfer: Making it work. A community college report. Washington, DC: American Association of Community and Junior Colleges.

Donovan, R. A., Schaier-Peleg, B., & Forer, B. (1987). Transfer: Making it work. Ford Foundation final report of the urban community college/transfer opportunities program. Report number ED281579.

Douglass, M. P. (Ed.). (1973). Reading in education: A broader view. Columbus, OH: Charles E. Merrill.

Douglass, M. P. (1980). Reading around the world. In M. P. Douglass (Ed.), Claremont Reading Conference Yearbook. Claremont, CA: The Claremont Graduate School, Claremont Reading Conference.

Dreyer, P. H. (1979). Reading in the year of the child. In M. P. Douglass (Ed.), Claremont Reading Conference Yearbook. Claremont, CA: The Claremont Graduate School, Claremont Reading Conference.

Dyste, R., & Minor, J. (1986). Status report on transfer center pilot program. Sacramento: Office of the Chancellor, California Community Colleges.

Eells, W. C. (Ed.). (1940). American junior colleges, first edition. Washington, DC: American Council on Education.

Eells, W. C. (1941). Present status of junior college terminal education. Washington, DC: American Association of Junior Colleges.

Fonseca, H. R. (1984). Los Angeles Mission College year-end narrative report. Ford Foundation urban community college transfer opportunities program. San Fernando, CA: Los Angeles Mission College.

Garcia, R., & Romanik, D. (Eds.). (1984). Prescriptive education, Vol. II. In J. Preston (Ed.)., Miami-Dade Community College: 1984 institutional self-study. Miami: Miami-Dade Community College.

Goodman, J., & Melcher, K. (1984). Culture at a distance: An anthroliterary approach to cross cultural education. Journal of Reading, 28, pp. 200-207.

Guichard, G. (1986, July 24). Adoption of the master plan review commission report, California Community Colleges Chancellor's Office.

Joint Committee for Review of the Master Plan for Higher Education. (1987, January 7). Advance copy, final report, Joint Committee for Review of the Master Plan for Higher Education in California. Sacramento: Author.

Kerr, C. (1980, March 30). Keynote address to national convention of American Assosiatin of Junior and Community Colleges, San Francisco.

Kester, D. (1980, April 24). Highlights of the three years Norcal attrition reduction effort. A paper presented at the Community and Junior College Association Conference for Research and Development.

Kintzer, F. C., & Wattenbarger, J. L. (1985, May). The articulation/transfer phenomenon: Patterns and directions. American Association of Community and Junior Colleges, Council of Universities and Colleges, Eric Clearinghouse for Junior Colleges.

Kirsch, I. S., & Jungevent, A. (1986, September). Literacy: Profiles of America's young adults. Princeton, NJ: National Assessment of Educational Progress.

Kissler, G. R. (1980, November). The decline of transfer education? Faculty Association of California Community Colleges Bulletin.

Kissler, G. R. (1980, April). Trends affecting higher education in California in the 1980's. Los Angeles, CA: UCLA Planning Office.

Kissler, G. R. (1980). Trends affecting undergraduate education in the University of California. Berkeley, CA: University of California Board of Regents.

Knoell, D. M., & Medsker, L. L. (1964). Factors affecting performance of transfer students from 2 to 4 year colleges. Berkeley: University of California, Center for Study of Higher Education.

Knoell, D. M., & Medsker, L. L. (1965). From junior to senior college: A national study of the transfer student. Washington, DC: American Council on Education.

Knoell, D. M., et al. (1976, February). Through the open door: A study of patterns of enrollment and performance in California's community colleges. Report 76.1. Sacramento: California State Postsecondary Education Commission.

Kowalski, C. J. (1982). College dropouts: Some research findings. Psychology, a Quarterly Journal of Human Behavior, 19(2-3), pp. 45-49.

Krashen, S. (1985). Inquiries and insights: Essays on language teaching, bilingual education, and literacy. Hayward, CA: Alemany Press.

Krashen, S. D. (1985). Inquiries and insights: Second language teaching emersion and bilingual education literacy, selected essays. Hayward, CA: Alemany Press.

Krashen, S. (1987). Keynote address, Claremont Reading Conference, March 20, 1987, Claremont, California.

Krashen, S. (1982). Principles and practice in second language acquisition. Oxford: Pergamon.

Krashen, S. D. (1984). Writing, research, theory, and applications. Oxford: Pergamon, Institute of English.

Krashen, S. D., & Terrell, T. D. (1983). The natural approach: Language acquisition in the classroom. Oxford: Pergamon Press. San Francisco: Alemany Press.

Lee, B. S. (1984). Student follow-up survey, Spring 1984. Sacramento, CA: Los Rios Community College District.

Lee, B. S. (1987, December). Measures of progress, 1984-1987 a four year retrospective. Sacramento, CA: Los Rios Community College District.

Lee, B. S. (1986, September). Measures of progress, spring 1985 student follow-up. Sacramento, CA: Los Rios Community College District.

Lockard, D. N. (1986). Watershed years: Transformations in the community colleges of California 1945-1960. Unpublished doctoral dissertation, The Claremont Graduate School.

Lombardi, J. A. (1979). Decline of transfer education. Topical paper No. 70. Los Angeles Eric Clearinghouse for Junior Colleges.

Los Rios Community College District. (1986. Fall 1986 enrollment update: Trends and implications executive summary. Sacramento, CA: Los Rios Community College District.

Los Rios Community College District. (1985, Spring). Measures of progress, Spring 1985 student follow-up survey, executive summary. Sacramento, CA: Los Rios Community College District.

Losak, J. (1984, April). Success in the CLAST for those students who enter the college academically underprepared. Research Report No. 84-04. Miami: Miami Dade Community College.

Losak, J. (1984). Academic progress of students at Miami-Dade who were not eligible to enroll in the State University System. Research Report No. 84-30. Miami: Miami-Dade Community College.

Macmillan, T. F. (1982). The statewide longitudinal study: An overview of perspectives and policy recommendations. Management Report 1982-3/2, Association of California Community College Administrators.

Manning, G., & Manning, M. (1984, May). What models of recreational reading make a difference? Reading World, 375-380.

Master Plan Survey Team. (1960). A master plan for higher education in California, 1960-1975. Sacramento: California State Department of Education.

Mathews, L. (1987, July 19). When being best isn't good enough. Why Yat-pang An won't be going to Berkeley. Los Angeles Times Magazine.

Medsker, L. L. (1960). The junior colleges: Progress and prospect. New York: McGraw-Hill.

Morrow, L. (1983). Home and school correlates of early interest in literature. Journal of Educational Research, 76, 221-230.

Morrow, L. (1982). Relationships between literature programs, library corner designs, and children's use of literature. Journal of Educational Research, 75, 339-344.

McCabe, R. H. (1948, November). Why Miami-Dade Community College is reforming the educational system. Miami: Miami-Dade Community College.

McConnell, T. R., Holy, T. C., & Semans, H. H. (1955). A restudy of the needs of California in higher education. Sacramento: California State Department of Education.

McDowell, F. M. (1919). The junior college. United States Bureau of Education Bulletin No. 35. Washington, DC: U.S. Government Printing Office.

McMillin, L. (1987, April 22). Scholar decries cultural illiteracy in America. The Chronicle of Higher Education.

Nadeau, A. (1980). Key concepts and instructional models for bilingual education programs. In M. P. Douglass (Ed.), Claremont Reading Conference Yearbook. Claremont, CA: The Claremont Graduate School.

Neumann, W. (1986, May). Persistence in the community college: The student perspective. Unpublished Ph.D. dissertation. Dissertation Abstracts International: Humanities and Social Science, 46(11), p. 3232.

Nolan, E. J., & Hall, D. L. (1974). A follow-up study of transfer students from Southern West Virginia Community College to Marshall University: 1967-1972. Logan, WV: Southern West Virginia Community College.

Oakes, J. (1986, Fall). Beyond tracking. Educational Horizons, 65(1), 32-35.

Opp, R., & Colby, A. (1987, April). Improving student retention in community colleges. ERIC Digest, Educational Resources and Information Center.

Palmer, J. (1987). Bolstering the community college transfer function. Eric Digest. Clearinghouse for Junior Colleges.

Parker, L., & Magnesen, V. (1986). Is it wizardry or magic? What makes an outstanding teacher? Innovation Abstracts, 8(28). National Institute for State and Organizational Development, Community College Leadership Program, the University of Texas at Austin.

Pascarella, E. T. (1985a). College environmental influences on learning and cognitive development: Critical review and synthesis. Higher education: Handbook of theory and research, Vol. 1, edited by J. Smart. New York: Agathon Press.

Pascarella, E. T. (1985b). Racial differences in the factors influencing bachelor's degree completion: A nine-year follow-up. Paper presented to the annual meeting of the American Educational Research Association, Chicago.

_____. (1985b). College environmental influences on learning and cognitive development: Critical review and synthesis. Higher education: Handbook of theory and research, Vol I, edited by J. Smart. New York: Agathon Press.

Paulson, B. L. (1984, March). A report on Mt. San Antonio College transfer students. Walnut, CA: Mt. San Antonio College.

Peterson, D. (1984). Los Angeles Harbor College Ford Foundation transfer report, 1983-84, interim report. Wilmington, CA: Los Angeles Harbor College.

Polland, B. K. (1983). The college success of academic high risk students, their personal perspectives. Unpublished Ph.D. dissertation, The Claremont Graduate School.

Prager, C. (Ed.). (1988, Spring). Enhancing articulation and transfer. A. M. Cohen, Ed., New Directions for Community Colleges. San Francisco: Jossey-Bass, Inc.

Renkiewiez, N. (1985). Moving on: A pilot study of student transfer, California State University, Sacramento, Los Rios Community College District, University of California Davis, Los Rios Community College District.

Reyes, A. (1974). Academic success of San Jose City College students using selected student characteristics. San Jose, CA: San Jose City College.

Richardson, R. C., Jr. (1988, May). Improving transfer for urban community college students. Leadership Abstracts. Austin, TX: League for Innovation in the Community College, University of Texas.

Richardson, R. C., Jr., & Bender, L. W. (1986). Students in urban settings: Achieving the baccalaureate degree. Washington, DC: Association for the Study of Higher Education.

Richardson, R. C., Jr., Fisk, E. C., & Okun, M. A. (1983). Literacy in the open-access college. San Francisco: Jossey-Bass.

Roueche, J. E., & Baker, G. A., III. (1987, January). Access and excellence: The open door college. Washington, DC: The Community College Press.

Roueche, J. E., Baker, G. A., III, & Roueche, S. D. (1987, April-May). Open door or revolving door? Open access and the community college. Community, Technical, and Junior College Journal, 22-26.

Ryan, J. (1977). Family patterns of reading problems: The family that reads together. In M. P. Douglass (Ed.), Claremont Reading Conference 41st Yearbook. Claremont, CA: The Claremont Graduate School, 159-163.

Sacramento City College. (1984). Putting it all together: A minority transition program. Sacramento, CA: Sacramento City College.

San Diego City College. (1984). The Ford Foundation: Urban community college transfer opportunities program. Narrative report: San Diego City College. San Diego, CA: San Diego City College.

San Gabriel Valley Tribune. (1987, July 25). Editorial. The right touch.

Sanchez, N. (1987, June 10). Bilingual training can be a barrier to academic achievement for students. The Chronicle of Higher Education.

Sandusky, S. (1987, November). California State University eligibility--how many community college students were initially eligible? Sacramento, CA: Sacramento City College.

Schon, I., Hopkins, K., & Davis, W. A. (1982). The effect of books in Spanish and free reading on Hispanic students' reading abilities and attitudes. NABE Journal, 7, 13-20.

Semans, H. H., & Holy, T. C. (1957). A study of the need for additional centers of public education in California. Sacramento: California State Department of Education.

Sheldon, M. S. (1982). Statewide longitudinal study: Report on academic year 1978-81, Part 5: Final report. Woodland Hills, CA: Los Angeles Pierce College.

Sheldon, M. S. & Grafton, C. L. (1981). Summary of statewide longitudinal study. Unpublished paper.

Sheldon, M. S. (1979). Statewide longitudinal study: Report on academic year 1978-1979, Part 2: Spring results. Los Angeles, CA: Los Angeles Pierce College.

Sheldon, W. D. (1967). Comparison of three methods of teaching reading in the second grade. New York: Syracuse University.

Shimabukuro, M. (1984). Laney College transfer opportunities program. Sponsored by the Ford Foundation, a narrative report, 1983-1984. Oakland, CA: Laney College.

Silverman, R. (1987, February 19). Academic success of Santa Monica Community College Transfers to UCLA. Paper for Southern California Community College Institutional Research Association, Santa Ana, CA.

Smith, F. (1985). Reading without nonsense. New York: Teachers College Press. Second edition.

Sotirion, P. E., & Ireland, J. (1984). Los Angeles City College urban transfer opportunities programs: Narrative report. Los Angeles, CA: Los Angeles City College.

Strayer, G. D., Deutsch, M. E., & Douglass, A. A. (1948, March 1). A report of a survey of the needs of California in higher education. Sacramento: The Liaison Committee.

Teale, W. (1984). Reading to young children: Its significance for literacy development. In H. Goelman, A. Oberg, & F. Smith (Eds.), Awakening to literacy. Exeter, NH: Heinemann Educational Books, 110-121.

Terenzini, P. T., & Parcarella, E. T. (1977). Voluntary freshman attrition and patterns of social academic integration in a university: A test of a conceptual model. Research in Higher Education, 6(3), 25-43.

Thorndike, R. L. (1973). Reading comprehension education in fifteen countries: An empirical study with forward by Torsten Husen. New York: Wiley.

Tinto, V. (1987). Leaving college: Rethinking the causes and cures of student attrition. Chicago: The University of Chicago Press.

Trombley, W. (1984, December 11). Reassessment of community-colleges role foreseen, portrait of typical student surprising. Los Angeles Times.

Trueba, H. T. (1981). Microethnographic research in bilingual classrooms. In M. P. Douglass (Ed.), Claremont Reading Conference Yearbook. Claremont, CA: The Claremont Graduate School.

U. S. Department of Education. (1986, November). Bulletin, Office of Educational Research and Improvement.

West Los Angeles College. (1984). West Los Angeles College transfer opportunities program: Report to the Ford Foundation. Culver City, CA: West Los Angeles College.

ERIC Clearinghouse for
Junior Colleges

AUG 3 1 1990